NO—MO/31.

GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

MAGNETIC, METEOROLOGICAL AND SEISMOGRAPHIC OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORIES,

BOMBAY AND ALIBAG,

IN THE YEAR

1931

UNDER THE DIRECTION OF

S. K. BANERJI, D.Sc.

Published by Authority of the Government of India.

PUBLISHED BY MANAGER OF PUBLICATIONS, DELHI.
PRINTED BY THE MANAGER, GOVERNMENT OF INDIA PRESS, NEW DELHI.
1935.
Price Rs. 12 As. 6 or 20s.

Government of India Publications are obtainable from the Manager of Publications, Civil Lines, Delhi, and from the following Agents :—

BOMBAY BRANCH
OF THE
ROYAL ASIATIC SOCIETY.
TOWN HALL, BOMBAY.

EUROPE.

OFFICE OF THE HIGH COMMISSIONER FOR INDIA, INDIA HOUSE, ALDWYCH, LONDON, W. C. 2.

And at all Booksellers.

INDIA AND CEYLON : Provincial Book Depôts.

MADRAS :—Superintendent, Government Press, Mount Road, Madras.
BOMBAY :—Superintendent, Government Printing and Stationery, Queen's Road, Bombay.
SIND :—Library attached to the Office of the Commissioner in Sind, Karachi.
BENGAL :—Bengal Secretariat Book Depôt, Writers' Buildings, Room No. 1, Ground Floor, Calcutta.
UNITED PROVINCES OF AGRA AND OUDH :—Superintendent of Government Press, United Provinces of Agra and Oudh, Allahabad.
PUNJAB :—Superintendent, Government Printing, Punjab, Lahore.
BURMA :—Superintendent, Government Printing, Burma, Rangoon.
CENTRAL PROVINCES AND BERAR :— Superintendent, Government Printing, Central Provinces, Nagpur.
ASSAM :—Superintendent, Assam Secretariat Press, Shillong.
BIHAR AND ORISSA :—Superintendent, Government Printing, Bihar and Orissa, P. O. Gulzarbagh, Patna.
NORTH-WEST FRONTIER PROVINCE :—Manager, Government Printing and Stationery, Peshawar.

Thacker, Spink & Co., Ltd., Calcutta and Simla.
W. Newman & Co., Ltd., Calcutta.
S. K. Lahiri & Co., Calcutta.
The Indian School Supply Depôt, 309, Bow Bazar Street, Calcutta.
Butterworth & Co. (India), Ltd., Calcutta.
M. C. Sarcar & Sons, 15, College Square, Calcutta.
Standard Literature Company, Limited, Calcutta.
Association Press, Calcutta.
Chukervertty, Chatterjee & Co., Ltd., 13, College Square, Calcutta.
The Book Company, Calcutta.
James Murray & Co., 12, Government Place, Calcutta. (For Meteorological Publications only.)
Ray, Chaudhury & Co., 68/5, Ashutosh Mukherji Road, Calcutta.
Scientific Publishing Co., 9, Taltola Lane, Calcutta.
Chatterjee & Co., 3-1, Bacharam Chatterjee Lane, Calcutta.
Standard Law Book Society, 5, Hastings Street, Calcutta.
The Hindu Library, 3, Nandalal Mullick Lane, Calcutta.
Kamala Book Depôt, Ltd., 15, College Square, Calcutta.
The Pioneer Book Supply Co., 20, Shib Narain Das Lane, Calcutta.
P. C. Sarkar & Co., 2, Shama Charan De Street, Calcutta.
* Bengal Flying Club, Dum Dum Cantt.
Kali Charan & Co., Municipal Market, Calcutta.
N. M. Roy Chowdhury & Co., 11, College Square, Calcutta.
Grantha Mandir, Cuttack.
B. C. Basak, Esq., Proprietor, Albert Library, Dacca.
Higginbothams, Madras.
Rochouse & Sons, Madras.
G. A. Natesan & Co., Publishers, George Town, Madras.
P. Varadachary & Co., Madras.
City Book Co., Madras.
Law Publishing Co., Mylapore, Madras.
The Booklover's Resort, Talkad, Trivandrum, South India.
E. M. Gopalakrishna Kone, Pudumandapam, Madura.
Central Book Depôt, Madura.
Vijapur & Co., Vizagapatam.
Thacker & Co., Ltd., Bombay.
D. B. Taraporevala Sons & Co., Bombay.
Ram Chandra Govind & Sons, Kalbadevi Road, Bombay.
N. M. Tripathi & Co., Booksellers, Princess Street, Kalbadevi Road, Bombay.
New and Secondhand Bookshop, Kalbadevi Road, Bombay.
J. M. Pandia & Co., Bombay.
A. H. Wheeler & Co., Allahabad, Calcutta and Bombay.
Bombay Book Depôt, Girgaon, Bombay.
Bennett, Coleman & Co., Ltd., The Times of India Press, Bombay.
The Popular Book Depôt, Bombay.
Lawrence & Mayo, Ltd., Bombay.
The Manager, Oriental Book Supplying Agency, 15, Shukrawar, Poona City.
Rama Krishna Bros., Opposite Bishrambag, Poona City.
S. P. Bookstall, 21, Budhwar, Poona.
The International Book Service, Poona 4.
Mangaldas & Sons, Booksellers and Publishers, Bhaga Talao, Surat.
The Standard Book and Stationery Co., 32-33, Arbab Road, Peshawar.

The Students Own Book Depôt, Dharwar.
Shri Shankar Karnataka Pustaka Bhandara, Malamuddi, Dharwar.
The English Book Depôt, Ferozepore.
Frontier Book and Stationery Co., Rawalpindi.
*Hossenbhoy Karimji & Sons, Karachi.
The English Bookstall, Karachi.
Ross & Co., Karachi.
Keale & Co., Karachi.
Ram Chander & Sons, Ambala, Kasauli.
The Standard Bookstall, Quetta and Lahore.
U. P. Malhotra & Co., Quetta.
J. Ray & Sons, 43, K. & L., Edwardes Road, Rawalpindi, Murree and Lahore.
The Standard Book Depôt, Lahore, Nainital, Mussoorie, Dalhousie, Ambala Cantonment and Delhi.
The North India Christian Tract and Book Society, 18, Clive Road, Allahabad.
Ram Narain Lal, Katra, Allahabad.
"The Leader", Allahabad.
The Indian Army Book Depôt, Dayalbagh, Agra.
The English Book Depôt, Taj Road, Agra.
Gaya Prasad & Sons, Agra.
Narayan & Co., Meston Road, Cawnpore.
The Indian Army Book Depôt, Jullundur City, Daryaganj, Delhi.
Manager, Newal Kishore Press, Lucknow.
The Upper India Publishing House, Ltd., Literature Palace, Aminuddaula Park, Lucknow.
Rai Sahib Munshi Gulab Singh & Sons, Mufid-i-Am Press, Lahore and Allahabad.
Rama Krishna & Sons, Booksellers, Anarkali, Lahore.
Students Popular Depôt, Anarkali, Lahore.
The Proprietor, Punjab Sanskrit Book Depôt, Saidmitha Street, Lahore.
The Insurance Publicity Co., Ltd., Lahore.
The Punjab Religious Book Society, Lahore.
The Commercial Book Co., Lahore.
The University Book Agency, Kachari Road, Lahore.
Manager of the Imperial Book Depôt, 63, Chandni Chowk Street, Delhi.
J. M. Jaina & Bros., Delhi.
Fono Book Agency, New Delhi and Simla.
Oxford Book and Stationery Company, Delhi, Lahore, Simla, Meerut and Calcutta.
Mohanlal Dossabhai Shah, Rajkot.
Supdt., American Baptist Mission Press, Rangoon.
Burma Book Club, Ltd., Rangoon.
S. C. Talukdar, Proprietor, Students & Co., Cooch Behar.
The Manager, The Indian Book Shop, Benares City.
Nandkishore & Bros., Chowk, Benares City.
The Srivilliputtur Co-operative Trading Union, Ltd., Srivilliputtur (S. I. R.).
Raghunath Prosad & Sons, Patna City.
The Students' Emporium, Patna.
K. L. Mathur & Bros., Guzri, Patna City.
Kamala Book Stores, Bankipore, Patna.
G. Banerjee & Bros., Ranchi.
M. C. Kothari, Raipura Road, Baroda.
B. Parikh & Co., Baroda.
The Hyderabad Book Depôt, Chader Ghat, Hyderabad (Deccan).
S. Krishnaswamy & Co., Teppakulam P. O., Trichinopoly Fort.
Standard Book and Map Agency, Book Sellers and Publishers, Bellygunge.
Karnataka Publishing House, Bangalore City.
Bheema Sons, Fort, Bangalore City.
Superintendent, Bangalore Press, Lake View, Mysore Road, Bangalore City.

AGENT IN PALESTINE :—Steimatzky, Jerusalem.
*Agents for publications on Aviation only.

Digitized with financial assistance from Government of India by the NMML. February, 2020

GOVERNMENT OF INDIA

METEOROLOGICAL DEPARTMENT

MAGNETIC, METEOROLOGICAL AND SEISMOGRAPHIC OBSERVATIONS

MADE AT THE

GOVERNMENT OBSERVATORIES,

BOMBAY AND ALIBAG,

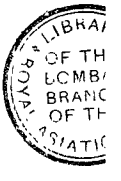
IN THE YEAR

1931

UNDER THE DIRECTION OF

S. K. BANERJI, D.Sc.

133516



00133516

Published by Authority of the Government of India.

PUBLISHED BY MANAGER OF PUBLICATIONS, DELHI.
PRINTED BY THE MANAGER, GOVERNMENT OF INDIA PRESS, NEW DELHI,
1933.

TABLE OF CONTENTS.

	Page.
1. Introduction ..	1
Meteorological instruments at Colaba	1
Magnetic instruments at Alibag	3
System of observation at Colaba	5
System of observation at Alibag	5
General Review ..	6
Absolute observations and base-line values	8
Seismographs ..	10
Magnetic Storms ..	10
Atmospheric Electricity ..	10
2. Barometric pressure—	
January ..	12
February ..	12
March ..	14
April ..	14
May ..	16
June ..	16
July ..	18
August ..	18
September ..	20
October ..	20
November	22
December	22
3. Rainfall—	
June ..	24
July ..	24
August ..	26
September	26
October ..	28
November	28
4. Wind velocity—	
January ..	30
February	30
March ..	32
April ..	32
May ..	34
June ..	34
July ..	36
August ..	36
September	38
October ..	38
November	40
December	40
5. Direction of wind—	
January ..	42
February ..	42
March ..	44
April ..	44
May ..	46
June ..	46
July ..	48
August ..	48
September	50
October ..	50
November	52
December	52

PAGE.

6. Air temperature— 54
January .. 54
February .. 56
March .. 56
April .. 58
May .. 58
June .. 60
July .. 60
August .. 62
September 62
October .. 64
November 64
December

7. Relative humidity— 66
January .. 66
February.. 68
March .. 68
April .. 70
May .. 70
June .. 72
July .. 72
August .. 74
September 74
October .. 76
November 76
December

8. Clouds and their movements .. 78

9. Duration of Bright Sunshine .. 84

10. Diurnal variation of magnetic elements .. 85

11. Declination— 88
January .. 88
February .. 90
March .. 90
April .. 92
May .. 92
June .. 94
July .. 94
August .. 96
September 96
October .. 98
November 98
December

12. Horizontal force— 100
January .. 100
February.. 102
March .. 102
April .. 104
May .. 104
June .. 106
July .. 106
August .. 108
September 108
October .. 110
November 110
December..

		PAGE.
13.	Vertical force—	
	January ..	112
	February..	112
	March ..	114
	April ..	114
	May ..	116
	June ..	116
	July ..	118
	August ..	118
	September	120
	October ..	120
	November	122
	December ..	122
14.	Magnetic disturbances	124
15.	Fourier analysis of the diurnal and annual variations of the horizontal force	125
16.	Potential gradient	125
17.	Seismic disturbances	128
18.	Alibag Observatory Magnetograms	*Plates I to V*

INTRODUCTION.

This volume on the magnetic, meteorological and seismographic observations made in the Government Observatories, Bombay and Alibag, during the year 1931, is the fiftythird volume of its kind issued by the Observatory and extends the records of continuous meteorological and magnetic observations to a period of eightysix years and seismographic observations to a period of thirtythree years. It has been prepared in the same form as the volumes for the years 1928, 1929 and 1930. The hourly values of all the important meteorological and magnetic elements have been given and these represent their average values over one hour and not their momentary values at the end of every hour. Columns have been added in this volume giving the daily mean values and the monthly mean hourly values of barometric pressure in milibars and of air temperature in centigrades. Although systematic observations of atmospheric electricity commenced in 1929, no data relating to potential gradient have been published in previous volumes. In the present volume values of potential gradient centred at every sixth hour of Greenwich mean time have been given.

The transference of magnetic work from Colaba to Alibag in 1904, due to the city of Bombay having decided to have electric tram service, caused a certain amount of discontinuity in the magnetic records, which had run uninterruptedly then at Colaba for about sixty years, but as comparative observations could be taken at both the stations for a period of two years before the electric tram lines were completed and the service had commenced its operations, the 'discontinuity' could be calculated and allowed for. The comparative observations show that at Alibag, the horizontal component of magnetic force stands lower by 0·00510 C. G. S. unit of force, easterly declination stands higher by 53′·5 and inclination stands higher by 1° 4′·7 than at Colaba, and these are the finally adopted differences between the two sites. The figures published in this volume, like those in the previous volumes since 1906, have not been corrected for these differences.

The Colaba Observatory is situated almost at the extreme south end of the narrow ridge of land extending about three miles to the south-west of the Fort of Bombay and separating the Harbour from the Back Bay. The level of the Observatory compound is about 32 feet above the mean level of the sea. The regular registration of meteorological observations in the Colaba Observatory commenced in November 1841.

The astronomical co-ordinates* giving the position of the Colaba Observatory are :—

Latitude	18° 53′ 36·18″ N.
Longitude	72° 48′ 54·03″ E.

The Alibag Magnetic Observatory is situated on the main land about 18 miles south-south-east of Bombay, and its astronomical co-ordinates are—

Latitude	18° 38′ 17″ N.
Longitude	72° 52′ 21″ E.

For a general description of the buildings and instruments in both the Observatories, see "Magnetical, Meteorological and Seismographic Observations made at the Government Observatories, Bombay and Alibag, 1906—1910," and also the similar volume for 1916—20.

Unless otherwise stated, all times given in this volume refer to local mean time.

Meteorological instruments at Colaba.

1. *Standard Barometer.*—The barometer is by Newman (No. 58) and has been in uninterrupted use since the establishment of the Observatory. It reads on an average 0·004″ below the Kew Standard and 0·012″ below the old Calcutta standard barometer. The height of the barometer is 37 feet above the mean sea-level. A subsidiary standard barometer, Newman No. 48, has also been maintained in the underground constant temperature room, and its reading exceeded that of the standard barometer by 0·002″ on the average during the year.

2. *Barograph.*—The instrument is of the Kew pattern and was installed in the underground constant temperature room in 1872. The variation of pressure is recorded photographically. The barograph has been treated, as in the past, as an independent instrument in respect of the variation of pressure occurring in the course of a day. A comparative study of the differences between the readings of the barograph and of the standard barometer for a large number of years indicates that these differences maintain fairly constant values and do not show variations at different hours of the day. The mean of the excesses of the eye observations of the standard barometer made at 8 hrs. on seven consecutive days over the corresponding barograph tabulations has been applied as a common correction to all the tabulated hourly readings of the day which is the fourth of the seven.

3. *Standard Dry bulb and Wet bulb Thermometers.*—On the 26th November 1917, the freezing points were tested and the zero of the dry bulb standard thermometer No. 401 was

*Magnetic, Meteorological and Seismographic observations made at the Government Observatories, Bombay and Alibag, 1922, p. 1.

found to have changed from 32°·6 to 33°·0 F. and that of the wet bulb standard thermometer No. 402 from 32°·5 to 33°·0 F. These thermometers were again tested on the 3rd February 1926 and their corrections were found to be the same as those determined in 1917. Besides the above, there are eye reading dry bulb, wet bulb, maximum and minimum thermometers installed in a standard Stevenson Screen. The heights of the bulbs of the thermometers above the ground in the two sheds are given below:—

Thermograph Shed ; Dry bulb 10′ ; Wet bulb 10′.

Stevenson Screen ; „ „ 4′ 4½″ ; „ „ 4′ 4″ ; Max. 4′ 11½″ ; Min. 4′ 4″.

For the results of comparative observations of these thermometers see p. 2 of the volume for the year 1924.

4. *Kew Dry bulb and Wet bulb Thermograph.*—The bulbs of these thermograph thermometers are placed close to those of the standard dry and wet bulb thermometers in a large double-louvre shed constructed in 1872, and the variation of temperatures is recorded photographically. The tables of air temperature have been obtained from the tabulations of dry bulb and of humidity from dry and wet bulb thermograms. The mean differences between the readings of the standard dry and wet bulb thermometers described in the preceding para. and the corresponding readings of the thermograms for the year 1931 were +0°·2 and +0°·1 respectively and were neglected.

5. *Robinson-Beckley's Anemograph.*—This anemograph is of the kind designed by Robinson, with improvements by Robert Beckley and has been in uninterrupted use in the Observatory since 1867, except that a new instrument of the same pattern and by the same makers was installed in 1907 to replace the old one. It is erected on the Anemometer Tower with its cups at a height of 58 feet above the ground and 100 feet above the mean sea-level. The centres of each pair of opposite hemi-spherical cups are four feet apart, and the diameter of each of the cups is 9 inches. The diameter of the vanes of the direction recorder is 15 inches and the breadth of the fans 4 inches.

6. *Dines' Anemograph, 1924 (velocity and direction).*—The old Dines' anemograph which was in continuous operation from 1896 and was provided with velocity recorder only was stopped in December 1929. A new Dines' anemograph provided with both velocity and direction recorders by R. W. Munro and Co. was received in 1923 and installed on the Anemometer Tower in January 1924. With a view to get the best possible exposure, its modern type T-shaped head-vane was placed on the top of a telegraph post, 32·5 feet high, fixed on the Tower at a distance of 3 feet from the cups of the Robinson-Beckley's anemograph. The vane was therefore 27 feet above the level of Robinson-Beckley's cups and 127 feet above the mean sea-level. The diameter of the post near the Beckley's cups is 8 inches and it does not therefore exercise any appreciable influence on the records of Robinson-Beckley. This is due to the fact that in a current of air flowing past a fixed cylindrical obstacle, the stream lines, although they get deformed near the obstacle, assume again very nearly the original configuration at a distance from the obstacle equal to its diameter, and at this distance the velocity of the air current, too, attains almost its original value. The results of a series of comparisons of this instrument with a U-tube pressure-gauge showed that W, the difference in level of water in inches in the two arms of the U-tube, which is a measure of the pressure exerted by the wind, and V, the velocity of the wind in miles per hour as indicated in the charts, practically obey the standard law, namely, $W = \cdot 000731\ V^2$.

The height of the vane of this anemometer is 26 feet above that of the old Dines' anemometer. On account of this greater height, this instrument records a larger velocity of wind, and smaller gustiness; the types of records by the two instruments are however identical. The ratio of the mean wind velocities recorded by the new Dines' anemograph to those recorded by the Beckley's anemograph during 1924–31 is given below for the different months, seasons and the year :—

Ratio of Wind Velocities (1924-31)	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Means. October to February.	Means. March to May.	Means. June to September.	Year.
New Dines to Rob. Beckley.	1·44	1·45	1·37	1·37	1·43	1·47	1·73	1·74	1·63	1·53	1·55	1·47	1·49	1·39	1·65	1·52

The hourly values of wind velocity and wind direction tabulated in this volume represent the average of the Dines' records for periods of sixty minutes, from full hour to full hour of local mean time. The daily mean directions have been derived by converting the hourly velocity into N or S and E or W components and combining the mean components.

7. *Rain-gauge.*—Newman's rain-gauge, which has been in use since 1845, exposes for the collection of rain-drops at a height of four feet above the ground a circular surface of an average diameter of 12·035 inches, forming the tip of the funnel, which opens into a cylindrical vessel below, having a diameter of 5·732 inches. Each division of the graduated rod resting on the float represents ·05 inch of rain and the readings of this scale are easily estimated to one-fifth of a division.

8. *Photographic Rain-gauge.*—This instrument takes a continuous record of rainfall by photographing the head of a mercury column balancing the rainfall collected in a glass vessel, with an arrangement for syphon discharge when full. A full description of this instrument will be found in the introduction to the " Bombay Magnetical and Meteorological Observations, 1871 to 1878 ", page xlvi. For methods of reduction of pluviograph records, reference is made to the introduction to the " Bombay Magnetical, Meteorological and Seismographic Observations, 1916-20 ". The height of the receiving funnel of this instrument is 28 feet above the ground. On account of its greater height, the pluviograph gives a lower value for rainfall than that by Newman.

For comparative study a syphon rain-gauge by L. Casella, London, was installed in the enclosure of the standard Newman rain-gauge on the 12th June 1930, so that the receiving funnels of both were at the same height. It was removed to a separate enclosure on the 28th April 1931 and its receiving funnel was kept at the standard height of 30 inches above the ground surface.

Magnetic Instruments at Alibag.

Variation Instruments.

The horizontal force, vertical force and declination magnetographs in use at Alibag are all by Watson and are mounted on isolated pillars in the magnetograph room. They were maintained in continuous action throughout the year. As explained on pages 1-2 of the Observatory volume for 1927, the sensitiveness of the vertical force magnetograph was increased eightfold on the 7th August 1927, by introducing certain alterations in the mechanism for adjusting the position of the centre of gravity of the 'balance'. The instrument worked very satisfactorily throughout the year and furnished excellent records of the changes in the vertical force.

A declination magnetograph with high optical magnification (1cm.=3·43 minutes of arc) was constructed locally and installed in the ground floor room of the magnetometer building. It was in continuous action from the 30th May 1931. The records furnished by this instrument are identical with those obtained with the Watson declination magnetograph except that the variations are shown in a more conspicuous manner.

The maximum and minimum temperatures in the magnetograph room during 1931 are shown below in degrees Fahrenheit.

1931.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
	°	°	°	°	°	°	°	°	°	°	°	°	°
Maximum .	84·5	83·7	85·0	88·9	90·5	91·0	90·0	87·0	86·9	87·0	86·9	86·1	91·0
Minimum .	83·5	83·3	83·3	85·0	88·0	89·9	86·6	84·8	84·9	86·1	86·0	84·0	83·3

Two Eschenhagen variometers, one for horizontal force and the other for vertical force, are also installed in the magnetograph room and are read five times every day. A set of Kew Horizontal Force Magnetometer, Kew Vertical Force Magnetometer and Declination Magnetometer is installed in the ground-floor room of the magnetometer building as auxiliary eye-reading instruments. The declination magnetometer only was read at the five observational hours till the 1st November 1931. The eye observations were regularly plotted and were used mainly for a comparative study of the performance of the different instruments. The magnetograms have been used in deducing the tabulated results. The hourly tabulations represent the average values during one hour, centred at the full hours of Greenwich Mean Time.

The scale coefficients of the force magnetographs were obtained every fortnight from deflection observations performed on the instruments with deflectors, at a distance of 100 cm. and 120 cm. in the case of H and at a distance of 124·05 cm. and 148·6 cm. in the case of V magnetographs. The usual distribution coefficient $(1 + \frac{P}{r^2})$ was introduced in the formula for the computation of scale coefficients. It was found that the mean values of the factor in the case of H. F. magnetograph were for both

the distances equal to unity and in the case of V. F. magnetograph were 1·10 and 1·07 for the nearer and the longer distances respectively. The value of the scale coefficient adopted for any month is the mean of the mean observed value for that month and those for the preceding and succeeding months.

The following table gives the scale coefficients for 1 cm. ordinate on the photographic paper of the force magnetographs in γ, where as usual, γ =0·00001 C. G. S. unit of force.

Instrument.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
H. F. Magnetograph	44·9	44·9	44·8	44·8	44·7	44·7	44·8	44·8	44·9	44·8	45·0	45·1
V. F. Magnetograph	11·9	11·8	11·7	12·1	12·6	12·9	12·7	12·7	11·7	12·1	12·2	12·3

The scale coefficient of the Watson declination magnetograph for 1 cm. of ordinate is 10′·28.

The temperature coefficient for the horizontal force magnetograph has been determined by heating experiments and its adopted value is ·000036 in C. G. S. unit for 1° F. The temperature coefficient of the vertical force magnetograph was found by similar experiments to be negligible as no appreciable change in force, after allowing for the actual diurnal change, could be definitely ascertained as being due to temperature effect. The above conclusions have been checked by an analysis of the observed monthly values of base* lines by means of the formula $B_t = B_m + \alpha\,(t-m)$, where B_t is the monthly mean value of the base line, uncorrected for temperature but corrected for the slow secular change caused by the loss of magnetic moment and other causes, t the mean temperature during the month, B_m the annual mean of the observed values of the base line, m the annual mean temperature of the magnetograph room, and α the temperature coefficient. Several years' data have been analysed in this manner. The mean value of α for H. F. based on the data for the years 1924-31 is ·000051 in C. G. S. unit for 1° F. The adopted value is thus seen to be smaller by about 29 per cent. than that obtained by this method, but no correction has been introduced in the reduction on account of this difference. For V. F. the value of α appears to be negligible.

Absolute Instruments.

Two magnetometers have been under regular observations during the period for obtaining the absolute values of horizontal force and declination. Magnetometer No. 7 by T. Cooke and Sons, which is the standard instrument at Alibag, is of the ordinary type of Kew pattern instruments but is modified and improved in several important details. The other instrument is Magnetometer No. 3 by the Cambridge Scientific Instrument Company and is of the usual Kew pattern. Instrument No. 7 is observed on the second floor of the magnetometer building, while instrument No. 3 with magnets No. 137 is observed on the first floor and with magnets No. 3 on the second floor. A pair of new magnets No. 7 with their constants determined at the Greenwich Magnetic Observatory (Abinger) was received from Messrs. Cooke, Troughton and Sims, Limited, and observations of Horizontal Force and Declination were taken every four weeks with these magnets and magnetometer No. 7 on the second floor throughout the year for comparative purposes. The results show very close agreement with those obtained with the old magnets No. 7.

The value of the correction, $\text{Log}_{10}\left(1+\frac{P}{r^3}+\frac{Q}{r^4}\right)^{-1}$ used in the reduction of the horizontal force observations was obtained for a given month by taking the mean for seven months including the given month as fourth of the seven. The values of this correction for the different months of the year for the standard instrument at the deflection distance 22·5 cm. were as follows :—

January	.. 9·99276	May	.. 9·99280	September	.. 9·99283
February	.. 9·99273	June	.. 9·99283	October	.. 9·99278
March	.. 9·99274	July	.. 9·99284	November	.. 9·99274
April	.. 9·99278	August	.. 9·99282	December	.. 9·99275

Earth Inductor No. 41 by Schulze of Potsdam and galvanometer No. 200 by Plath are installed on specially constructed pillars in the second floor, while Inductor No. 108 by Otto Toepfer and its galvanometer are installed in the first floor of the magnetometer building. Both these instruments were in regular use.

*Memoirs of the India Meteorological Department, Vol. XXV, Par VII.

System of observation at Colaba.

From the beginning of 1929, the eye observations of the barometer and thermometers at 10 hrs. and 16 hrs. were stopped but continued to be taken at 8 hrs. An afternoon observation at 17 hrs., Indian Standard Time, was however introduced from the 15th November 1929.

The eye observations at 8 hrs. (local time) and 17 hrs. (Indian Standard Time) were taken in the following order :—

From 5 minutes to the hour to 2 minutes after the hour.	Extent and description of clouds, state of weather, occasional phenomena and direction of the wind.
At 2 „ „ „	Thermograph standard thermometer, dry-bulb. Thermograph standard thermometer, wet-bulb.
At 3 „ „ „	Newman's rain-gauge (in wet season).
From 7 to 9 „ „	Newman's standard barometer No. 58 and attached thermometer. Newman's standard barometer No. 48 and attached thermometer (read at 8 hrs. only).
At 10 „ „ „	Thermometer attached to barograph (read at 8 hrs. only).

Observations of the extent and description of clouds, state of weather, occasional phenomena and rainfall (in wet season) were also taken at 6, 10, 14, 16 and 22 hrs. Observations with nephoscope were taken at 8½, 12½ and 16½ hrs. every day. The maximum and minimum thermometers in the Stevenson Screen were read twice daily at 8 hrs. and 16 hrs.

During the monsoon months, Newman's rain-gauge was read daily at midnight in addition to the usual observations and the discharges of the syphon of the self-registering pluviograph were also read as often as required.

A Campbell-Stokes Sunshine recorder was installed on the balloon observation tower and was brought into regular use from August 1925.

Observations of magnetic declination were made once every month at Colaba about the 15th of each month. The mean of the differences between the observed absolute values of declination at Colaba and Alibag, from 1906 to 1931, is 52′·9 and this agrees fairly well with the value obtained by the comparative observations taken at the two stations in the years, 1904 and 1905.

Time-supply service.

The electric Clock in the Colaba Observatory controlling the drop of the time ball was duly regulated once every day by comparison with the standard sidereal clocks, two Riefflers and one Kullberg. Government chronometers, belonging to the Royal Indian Marine and the Royal Navy, were wound daily or twice a week as required and comparisons with the standard clock were made with sufficient frequency to render the instruments always ready for issue at call with well-determined rates.

Experience during the past few years showed that the time signals broadcasted from Bordeaux, Rugby and Nauen could be received at Bombay almost every day. Further observations of transits of stars were therefore no longer considered necessary. They were accordingly discontinued with effect from the 28th May 1928. The two transit instruments in the Observatory were, however, maintained in a condition so that they could be brought into use any time should the wireless signals fail to be received for any reason. Observations of rhythmic signals broadcasted from Bordeaux and Rugby were taken regularly during the year.

System of observation at Alibag.

Eye observations of the instruments mentioned below were taken daily, Sundays included shortly before 6, 10, 14, 16 and 22 hrs. at the instants specified against them.

These instants have been chosen so that they may approach as nearly as possible to the full hour of Greenwich Mean Time, which corresponds to 51 mins. of local time.

At 15 minutes to the hour .	Declination Magnetometer and thermometer in the Magnetometer room.
„ 11 „ „ „ .	Eschenhagen's Vertical Force Variometer and attached thermometer.
„ 10 „ „ „ .	Watson's Vertical Force Magnetograph and attached thermometer.
„ 9 „ „ „ .	Watson's Declination Magnetograph.
„ 8 „ „ „ .	Watson's Horizontal Force Magnetograph and attached thermometer.
„ 7 „ „ „ .	Eschenhagen's Horizontal Force Variometer and attached thermometer.
„ 6 „ „ „ .	Thermograph and the standard thermometer in the Magnetograph room (read twice daily at 6 and 16 hrs. only).

Deflection experiments, with vibration magnet of magnetometer No. 137, the moment of which is determined every fortnight as deflector at distances of 100 cm. and 120 cm. on the horizontal force magnetograph and at distances of 124·05 cm. and 148·6 cm. on the vertical force magnetograph were made once every fortnight. Similar deflection experiments with vibration magnet of magnetometer No. 3 as deflector were made once a month for the purpose of check work.

Deflection experiments, with vibration magnet No. 137 as deflector at a distance of 100 cm. on the Eschenhagen's horizontal force variometer, and at a distance of 75 cm. on the Eschenhagen's vertical force variometer, were also made once a fortnight.

Observations of absolute horizontal force were made with the Observatory standard instrument No. 7 and magnets No. 7 (old) on Wednesdays. Observations of absolute horizontal force were also taken with—

(1) the auxiliary magnetometer No. 3 and magnets No. 137, and
(2) the auxiliary magnetometer No. 3 and magnets No. 3, on alternate Mondays, and with,
(3) the standard magnetometer No. 7 and magnets No. 7 (new) on a Friday once in four weeks.

Observations of absolute declination were made with the standard magnetometer No. 7 and magnet No. 7 (old) on Thursdays. Observations of declination were also taken for comparative study with—

(1) magnetometer No. 3 and magnet No. 137 on Thursdays once a fortnight,
(2) magnetometer No. 3 and magnet No. 3 once in four weeks on a Thursday, and
(3) standard magnetometer No. 7 and magnet No. 7 (new) once in four weeks on a Thursday.

Observations of inclination were made with the Schulze's Inductor, which is the Observatory standard instrument, and another inductor by Otto Toepfer every day in the year with the exception of Sundays and holidays. Each of the two inductor instruments was ordinarily observed on alternate days, but for check work both the instruments were observed one after the other on Saturdays.

Transit observations of stars for the determination of time were made generally on Tuesdays and Fridays in the dry months; during the monsoon months no opportunity was lost of observing the sun or stars whenever visible. The adjustment of the transit instrument was frequently tested by reference to the fixed collimator mark and by level observations; the errors of collimation, level and azimuth were determined once every month except during the monsoon months. A complete observation of all the meteorological elements was taken at Alibag at 8 hrs. (local time) throughout the year.

General Review.

1. *Weather.*—The southwest monsoon rains commenced at Bombay on the 13th June and practically ended on the 17th October. The total rainfall recorded during the year amounted to 97·94″ and was 27·40″ above the normal of 72 years. The mean temperature of the year was 80°·4 which was 1°·1 above the normal. The greatest maximum temperature recorded was 93°·5 on the 20th April and the lowest minimum was 65°·2 on the 31st January. The mean temperature of all the months in the year was within 1° of the normal of the season. The mean velocity of wind during the year was 10·8 miles per hour. The greatest daily mean velocity was 29·4 miles per hour on the 12th June and the lowest was 5·9 miles per hour on the 19th May. The greatest mean hourly velocity was 37 miles on the 2nd July while the velocity of a single gust of wind as recorded by the New Dines' anemometer reached 49 miles per hour on the 2nd July.

2. *Magnetic conditions.*—The mean and the extreme values of the magnetic elements at Alibag during 1931 are given below along with the corresponding values for the previous ten years :—

Year.	H						D						V						I
	Mean.	Maximum.		Minimum.		Absolute annual range.	Mean.	Maximum.		Minimum.		Absolute annual range.	Mean.	Maximum.		Minimum.		Absolute annual range.	Mean
		Value.	Date.	Value.	Date.			Value.	Date.	Value.	Date.			Value.	Date.	Value.	Date.		
	γ	γ		γ		γ	′	′		′		′	γ	γ		γ		γ	° ′
1921	36935	37069	18th May.	36381	15th May.	688	15·9 E.	41·9 E.	15th May.	9·5 E.	7th July.	32·4	17227	17320	15th May.	17144	20th Jan.	176	25 0·8
1922	36946	37037	10th Mar.	36777	14th Sept.	260	12·6 E.	18·0 E	16th Feb.	6·6 E.	31st Aug.	11·4	17293	17351	12th Aug.	17222	5th Apr.	129	25 5·0
1923	36985	37071	27th Nov.	36854	24th Mar.	217	8·9 E.	13·6 E.	26th Jan.	3·6 E.	24th Sept.	10·0	17372	17432	3rd July.	17270	25th Jan.	162	25 9·6
1924	37029	37142	16th Oct.	36854	10th June.	288	5·6 E.	10·5 E.	29th Jan.	0·4 E.	15th Sept.	10·1	17452	17514	26th Dec.	17379	19th Jan.	135	25 14·1
1925	37065	37170	9th Mar.	36899	28th Dec.	271	3·4 E.	8·2 E.	24th May	2·0 W.	4th Sept.	10·2	17527	17589	25th Dec.	17421	21st Jan.	168	25 18·5
1926	37079	37227	26th Jan.	36755	15th Apr.	472	0·8 E.	9·9 E.	15th Apr.	4·9 W.	24th Aug.	14·8	17590	17654	15th Oct.	17504	4th Jan.	150	25 22·7
1927	37119	37350	22nd Oct.	36802	12th Oct.	548	1·9 W.	6·0 E.	22nd July.	8·6 W.	21st Aug.	14·6	17650	17710	24th Sept.	17565	14th Sept.	145	25 25·9
1928	37152	37403	7th July.	36718	8th July.	745	3·8 W.	11·6 E.	8th July	9·0 W.	19th Sept.	20·6	17698	17778	28th May.	17608	30th April	170	25 28·3
1929	37209	37316	11th Aug.	36988	12th Mar.	328	5·9 W.	0·5 W.	16th Apr.	11·1 W.	5th Sept.	10·6	17736	17797	24th Nov.	17655	29th Jan.	142	25 29·1
1930	37253	37373	14th Oct.	37021	16th June.	352	8·0 W.	2·6 W.	31st May	12·7 W.	25th Aug.	10·1	17777	17836	6th Oct.	17692	12th Jan.	144	25 30·6
1931	37323	37417	17th Oct.	37097	29th Oct.	320	10·5 W.	5·7 W.	15th Apr.	15·8 W.	30th June.	10·1	17806	17869	11th Nov.	17726	20th May.	143	25 30·3

The value of H has been steadily increasing since 1916. The increase from 1930 to 1931 is 70γ and is greater than the average rate of increase, namely 39γ, during the last 10 years. Declination diminished during the year at a rate which is nearly the same as that during the last ten years. The vertical force showed, as usual, a gradual increase, but the inclination which was increasing at a gradually decreasing rate during the last few years came to a halt during the year and had almost the same value as in the previous year.

The following table gives the character figure assigned to each day according to the international scheme. In accordance with the De Bilt circular letter of 1924, the figures have been deduced from a study of the departure of each day's range from the normal range for the day supplemented by an eye examination of the magnetograms.

Month.	"0" days.	"1" day.	"2" days.	Mean character figure.
1931.				
January . .	2, 3, 4, 5, 6, 7, 8, 12, 13, 14, 21, 22, 23, 24, 30, 31	1, 9, 10, 11, 15, 16, 18, 19, 20, 25, 26, 27, 28, 29	17	0·52
February .	1, 5, 6, 7, 8, 9, 10, 11, 12, 18, 19, 20, 21, 22, 23, 28	2, 3, 4, 14, 15, 16, 17, 25, 26 27	13, 24	0·50
March . .	1, 4, 5, 6, 7, 9, 11, 15, 16, 17, 18, 19, 22, 23, 24, 27, 28, 29, 30	2, 3, 8, 10, 12, 13, 14, 20, 25, 26, 31	21	0·42
April . .	2, 5, 6, 7, 8, 12, 13, 14, 15, 16, 21, 22, 23, 24, 25, 27, 28, 29, 30	1, 3, 4, 9, 10, 11, 17, 18, 26	19, 20	0·43
May . . .	1, 2, 3, 4, 5, 8, 9, 10, 12, 17, 18, 19, 20, 21, 22, 23, 24, 27, 28, 30, 31	6, 11, 13, 14, 15, 16, 25, 26, 29	7	0·35
June . .	4, 5, 6, 7, 11, 13, 14, 15, 16, 17, 18, 19, 20, 23, 24, 25, 29, 30	1, 3, 8, 9, 10, 12, 21, 22, 26, 27, 28	2	0·43
July . .	3, 5, 6, 7, 8, 9, 10, 13, 16, 17, 18, 19, 20, 21, 22, 27, 29, 30, 31	1, 2, 4, 11, 12, 14, 15, 24, 26	23, 25, 28	0·48
August . .	1, 2, 4, 6, 12, 13, 14, 15, 17, 18, 22, 23, 29, 30, 31	3, 5, 7, 9, 10, 11, 16, 19, 21, 24, 25, 26, 27, 28	8, 20	0·58
September .	2, 10, 11, 12, 13, 18, 21, 25, 26, 27, 28, 29	1, 5, 7, 8, 9, 14, 16, 17, 20, 21, 22, 23, 24	3, 4, 6, 15, 30	0·77
October . .	7, 8, 9, 10, 11, 16, 20, 24, 25	1, 3, 4, 5, 6, 12, 13, 14, 15, 18, 19, 21, 22, 23, 26, 31	2, 17, 27, 28, 29, 30	0·90
November .	1, 2, 12, 20, 21, 22, 23, 24, 28, 29, 30	3, 4, 7, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 25, 27	5, 6, 8, 26	0·77
December .	7, 8, 9, 18, 19, 20, 21, 22, 24, 25, 26, 27	1, 5, 6, 10, 11, 12, 13, 14, 15, 16, 17, 23, 30, 31	2, 3, 4, 28, 29	0·77

The annual mean character figure, as assigned by the Observatory, to the year 1931 is 0·58, while that assigned to the year 1930 is 0·76 and to 1929, 0·67. The corresponding De Bilt figures are 0·66, 0·83 and 0·67 respectively. Both the international as well as the local characterisations therefore suggest that the year 1931 as a whole was less disturbed than the previous two years. This is what one should expect as we are approaching the year with minimum number of sunspots. October was the most active and May the most inactive month in the year.

Absolute observations and Base Line Values.

Declination.

Absolute observations of declination were made once a week on Thursdays with the standard magnetometer No. 7. For comparative purposes, an observation of declination was taken immediately afterwards with the auxiliary magnetometer, No. 3 as already indicated.

Base-line values are derived by converting the ordinates corresponding to absolute observations with instrument No. 7 and magnets No. 7 (old) into angles and subtracting the converted ordinates from the observed absolute declination. The values so obtained of the base-lines of the declination magnetograph denote westerly declination.

The adopted values are derived by taking overlapping means of 5 successive observations and reducing them to the proper epoch, values for intermediate days being obtained by simple interpolation.

Declination base-line values, 1931.

(0° *plus* tabular minutes.)

Date.	Observed.	Adopted.	Date.	Observed.	Adopted.	Date.	Observed.	Adopted.
	′	′		′	′		′	′
January 1 .	70·3 W	70·3 W	May 1 .	69·8 W	69·7 W	September 3	68·6 W	68·9 W
„ 8 .	70·4	70·4	„ 7 .	69·7	69·7	„ 10 .	69·3	68·9
„ 15 .	70·8	70·4	„ 14 .	69·4	69·5	„ 17 .	69·3	69·1
„ 22 .	70·2	70·5	„ 21 .	69·7	69·2	„ 24 .	69·2	69·3
„ 29 .	70·4	70·6	„ 28 .	68·7	69·0	October 1 .	69·3	69·3
February 5 .	70·8	70·5	June 4 .	68·6	68·9	„ 8 .	69·3	69·4
„ 12 .	70·7	70·7	„ 11 .	68·4	68·7	„ 15 .	69·6	69·6
„ 19 .	70·7	70·8	„ 18 .	68·9	68·7	„ 22 .	69·6	69·7
„ 26 .	71·1	70·9	„ 25 .	68·9	68·8	„ 29 .	70·2	69·9
March 5 .	70·9	70·9	July 3 .	68·6	69·0	November 5 .	69·9	70·0
„ 12 .	71·1	71·0	„ 9 .	69·2	69·0	„ 12 .	70·3	70·1
„ 19 .	70·7	70·9	„ 16 .	69·1	69·1	„ 19 .	70·1	70·2
„ 26 .	71·0	70·8	„ 23 .	69·1	69·1	„ 26 .	70·1	70·2
April 2 .	70·8	70·5	„ 30 .	69·3	69·0	December 3 .	70·3	70·2
„ 9 .	70·5	70·4	August 8 .	68·9	68·9	„ 10	70·4	70·3
„ 16 .	69·5	70·1	„ 13 .	68·5	68·8	„ 17 .	70·2	70·3
„ 23 .	70·0	69·9	„ 20 .	68·7	68·6	„ 24 .	70·2	70·3
			„ 28 .	68·3	68·7	„ 31 .	70·3	70·3

Horizontal Force.

Absolute observations of horizontal force were made every week, on Wednesdays with the standard magnetometer No. 7 and magnets No. 7 (old). Observations with the auxiliary magnetometer No. 3 and magnets No. 3 or No. 137 were taken every week on

Mondays and also with magnetometer No. 7 and magnets No. 7 (new) on Fridays once in four weeks as already indicated. A day's observations comprise a double set of vibration and deflection experiments at three distances, which for No. 7 are 22·5 cm., 30 cm. and 40 cm. In calculating the base-line values the mean of the observed values at all the three distances has been used.

Base-line values are derived by converting the mean ordinates corresponding to absolute observations with instrument No. 7 in terms of γ and subtracting the converted ordinates from the mean observed absolute horizontal force. They are further reduced to a uniform temperature of 85° F. to make the series comparable from month to month and year to year.

The adopted values are derived by taking overlapping means of 5 successive double sets of observations and reducing them to the proper epoch, values for intermediate days being obtained by simple interpolation.

Horizontal force base-line values at 85° F., 1931.

Date.	Observed.	Adopted.	Date.	Observed.	Adopted.	Date.	Observed.	Adopted.
	γ	γ		γ	γ		γ	γ
January 7	37,004	37,007	May 6	37,020	37,016	September 3	36,992	36,998
„ 15	006	007	„ 13	021	019	„ 9	987	998
„ 21	010	007	„ 20	017	019	„ 16	994	37,001
„ 28	003	007	„ 27	024	018	„ 23	37,013	005
						„ 30	017	010
February 4	009	008	June 3	012	017	October 7	013	014
„ 11	003	008	„ 10	018	017	„ 14	013	013
„ 18	012	009	„ 17	014	015	„ 21	014	012
„ 25	013	009	„ 24	019	015	„ 28	006	013
March 5	008	010	July 1	014	013	November 4	017	014
„ 11	009	010	„ 8	009	011	„ 11	017	014
„ 18	007	010	„ 15	010	009	„ 18	015	016
„ 25	014	009	„ 22	003	006	„ 25	015	014
April 1	012	009	„ 29	009	004	December 2	015	013
„ 8	004	008	August 5	001	004	„ 9	007	012
„ 15	005	008	„ 12	36,999	005	„ 16	010	012
„ 22	005	010	„ 19	37,009	001	„ 23	014	010
„ 30	016	014	„ 26	006	36,999	„ 30	012	011

Vertical Force.

Dip observations with inductors were made every day in the year, with the exception of Sundays and holidays, each of the two instruments being observed on alternate days.

Base-line values are derived by expressing the mean ordinates of V. F. magnetograms corresponding to the inclination observations in terms of γ and subtracting the converted ordinate from the absolute vertical force obtained by multiplying the value of H. F. at the time by the tangent of inclination given by Inductor observations. Values derived from Inductor No. 108 are reduced to those derived from Inductor No. 41 (which is the Observatory standard) by applying the mean correction for the month deduced from the comparative observations taken on Saturdays of every week.

The adopted values are derived by taking overlapping means of 7 successive observations and reducing them to the proper epoch, values for those days not given by this operation being obtained by simple interpolation.

The vertical force magnetograph was adjusted on the 27th August, 23rd October and 26th October 1931. As already remarked the sensitiveness of the instrument increased eight times in consequence of the change introduced on the 7th August 1927 in the mechanism for altering the sensitiveness.

Vertical force base-line values, 1931.

Date.	Observed	Adopted.	Date.	Observed.	Adopted.	Date.	Observed.	Adopted.
	Y	Y		Y	Y		Y	Y
January 7 .	17,789	17,788	May 6 .	17,780	17,773	September 2 .	17,711	17,749*
„ 16 .	779	773	„ 13 .	745	762	„ 9 .	659	682
„ 21 .	767	767	„ 20 .	768	764	„ 16 .	707	689
„ 28 .	763	770	„ 27 .	826	781	„ 23 .	680	697
						„ 30 .	715	689
February 4 .	795	781	June 3 .	758	757	October 7 .	702	690
„ 11 .	759	771	„ 10 .	730	739	„ 14 .	717	694
„ 18 .	821	805	„ 17 .	768	756	„ 21 .	733	699*
„ 25 .	793	791	„ 24 .	773	775	„ 29 .	697	717
March 6 .	761	782	July 1 .	756	786	November 4 .	774	754
„ 11 .	827	812	„ 8 .	818	823	„ 11 .	721	734
„ 18 .	801	815	„ 15 .	832	832	„ 18 .	742	742
„ 25 .	822	829	„ 22 .	804	828	„ 25 .	706	701
April 1 .	821	825	„ 29 .	843	826	December 2 .	684	693
„ 8 .	832	806	August 5 .	820	840	„ 9 .	688	696
„ 15 .	822	800	„ 12 .	831	849	„ 16 .	738	742
„ 22 .	808	789	„ 19 .	848	851	„ 23 .	801	788
„ 30 .	779	767	„ 26 .	807	851	„ 30 .	749	761

* Adjustments of V. F. magnetograph.

Seismographs.

Two Milne-Shaw Seismographs (N-S and E-W components), were in continuous action in the underground constant temperature room, and both gave excellent records of earthquakes and microseisms during the year. The earthquakes recorded by these instruments will be found tabulated towards the end of the volume. The locally constructed seismograph of the Omori type (N-S and E-W components) was kept in continuous operation during the year as an auxiliary instrument. The Omori-Ewing Seismograph (E-W component) was transferred to Rangoon in June 1931.

Magnetic Storms.

In plates I, II, III, IV and V are reproduced disturbed magnetic records for days recommended for publication by the International Commission of Terrestrial Magnetism. The base-line values and scale co-efficients are shown with each curve. The hourly breaks last for 2 to 3 minutes and the time shown against a break is the time for the middle of the break expressed in Greenwich Mean Time. Increasing ordinates for H. F. and V. F. curves mean increase in force, and for the declination curves decrease in westerly declination.

Atmospheric Electricity.

Observations of the variation in the potential gradient were continued during the year. For this purpose two Bendorf self-recording electrometers were installed. One of these was joined to a double-nozzle Kew pattern water-dropper and the other to an ionium collector supplied by the Carnegie Institution of Washington. A photographic electrograph by Cambridge Instrument Co., as described in the Journal of Scientific Instruments, Vol. V, May 1928, pages 145—152, was received in May 1930 and installed on the 13th June 1930 in the old Milne seismograph room. It was removed to a specially constructed room in the open space near the sea coast on the 28th February 1931 and its radium collector was exposed through a hole in the wall at a height of 168 cm. above ground and on undisturbed days at a distance of 40 cm. from the wall. The values of the potential gradient centered at every sixth hour of Greenwich mean time have been given in the present volume.

S. K. BANERJI,
Meteorologist, Bombay.

Colaba Observatory, Bombay,
The 23rd August 1932.

Meteorological Tables.

(Colaba Observatory.)

JANUARY. (Averages for periods of sixty minutes from full hour to full hour of local mean time.)

(IN INCHES OF MERCURY AT 32° F.)

Date.	Hours.													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
1	29·967	29·953	29·949	29·943	29·951	29·951	29·973	29·991	30·025	30·019	30·012	29·986	29·958	29·927
2	·947	·928	·925	·913	·917	·923	·955	·975	·003	·005	29·997	·967	·930	·895
3	·940	·928	·921	·916	·912	·910	·934	·947	29·974	29·976	·972	·944	·912	·892
4	·928	·926	·912	·910	·922	·932	·946	·976	30·011	30·022	30·012	·982	·932	·908
5	·921	·908	·899	·901	·907	·913	·935	·955	29·983	29·982	29·955	·938	·893	·879
6	·883	·871	·866	·851	·852	·852	·877	·890	·918	·920	·914	·984	·856	·822
7	·875	·863	·866	·852	·863	·868	·892	·916	·947	·948	·945	·924	·893	·861
8	·898	·880	·878	·861	·874	·880	·906	·928	·954	·954	·951	·918	·883	·850
9	·883	·864	·864	·858	·865	·868	·894	·904	·937	·940	·932	·902	·872	·851
10	·899	·886	·886	·878	·886	·888	·915	·936	·964	·965	·960	·923	·895	·865
11	·927	·917	·907	·897	·908	·913	·948	·949	·971	·977	·966	·934	·900	·884
12	·914	·901	·893	·881	·891	·901	·932	·953	·978	·978	·972	·950	·931	·903
13	·933	·918	·917	·904	·911	·923	·951	·969	30·000	30·000	·996	·968	·935	·913
14	·986	·971	·958	·943	·942	·946	·971	·990	·011	·011	·999	·971	·938	·909
15	·960	·944	·937	·926	·934	·938	·958	·971	·002	·002	·995	·964	·930	·912
16	·960	·941	·932	·928	·934	·934	·957	·960	29·986	29·984	·969	·939	·916	·882
17	·944	·928	·924	·908	·920	·919	·948	·966	·998	·996	·994	·970	·944	·922
18	·962	·947	·951	·943	·951	·953	·978	·999	30·025	30·021	30·010	·983	·958	·929
19	·933	·925	·923	·923	·928	·930	·947	·965	29·987	29·991	29·993	·967	·929	·899
20	·917	·903	·899	·888	·887	·891	·932	·941	·957	·965	·971	·945	·921	·889
21	·895	·887	·889	·883	·891	·893	·918	·941	·966	·969	·978	·956	·931	·905
22	·901	·887	·883	·881	·895	·893	·919	·929	·953	·955	·957	·939	·917	·878
23	·901	·891	·891	·880	·885	·885	·917	·935	·964	·967	·970	·954	·928	·912
24	·924	·913	·902	·888	·899	·911	·939	·951	·985	·989	·986	·967	·951	·921
25	·941	·930	·939	·939	·947	·947	·969	·999	30·019	30·027	30·022	·998	·967	·933
26	·981	·969	·969	·967	·973	·979	30·013	30·033	·062	·063	·062	30·041	30·015	·993
27	30·015	30·001	·989	·971	·973	·975	·005	·018	·047	·049	·047	·023	29·989	·959
28	29·971	29·956	·948	·936	·942	·946	29·966	29·980	·002	·000	29·999	29·987	·960	·919
29	·923	·906	·899	·894	·896	·898	·915	·933	29·961	29·966	·971	·950	·926	·896
30	·916	·911	·904	·892	·900	·902	·937	·956	·988	·994	·990	·966	·950	·916
31	·937	·918	·918	·905	·925	·939	·970	·982	30·020	30·026	30·030	30·018	·987	·964
Mean .	29·932	29·918	29·914	29·905	29·912	29·916	29·942	29·959	29·987	**29·989**	29·985	29·960	29·931	29·903
Variation.	+·002	—·012	—·016	—·025	—·018	—·014	+·012	+·029	+·057	**+·059**	+·055	+·030	+·001	—·027
Mean in milibars.	1013·57	1013·17	1013·03	1012·67	1012·97	1013·10	1013·97	1014·50	1015·44	**1015·50**	1015·37	1014·60	1013·53	1012·6
Variation in milibars.	+·04	—·36	—·50	—·86	—·56	—·43	+·44	+·97	+1·91	**+1·97**	+1·84	+1·07	0	—·93

FEBRUARY.

1	30·004	29·986	29·976	29·960	29·963	29·969	29·993	29·996	30·027	**30·034**	30·034	30·020	30·002	29·972
2	·001	·980	·970	·957	·957	·956	·991	30·000	·030	·034	·029	·000	29·970	·948
3	29·917	·896	·881	·872	·894	·894	·905	29·926	29·960	29·960	29·962	29·946	·928	·896
4	·903	·892	·886	·878	·888	·896	·924	·938	·976	·980	·980	·958	·930	·912
5	·904	·888	·879	·876	·890	·893	·920	·930	·958	·958	·961	·931	·902	·868
6	·880	·862	·850	·835	·839	·845	·873	·894	·918	·929	·940	·918	·892	·864
7	·886	·869	·866	·850	·849	·849	·873	·884	·911	·911	**·918**	·899	·885	·861
8	·907	·886	·875	·856	·851	·866	·903	·919	·947	·956	·962	·937	·910	·895
9	·882	·866	·862	·851	·864	·871	·887	·899	·923	·925	·927	·910	·901	·873
10	·916	·899	·889	·881	·885	·879	·890	·893	·913	·924	·924	·904	·875	·840
11	·895	·878	·868	·852	·858	·865	·897	·919	·950	·946	·949	·933	·916	·883
12	·918	·897	·891	·877	·884	·889	·918	·936	·967	·976	·969	·946	·927	·892
13	·926	·910	·909	·899	·901	·891	·922	·934	·965	·970	·981	·965	·952	·931
14	·966	·950	·942	·929	·928	·931	·948	·954	·982	·984	·979	·952	·920	·887
15	·876	·856	·850	·842	·842	·842	·858	·870	·896	·906	·908	·878	·869	·840
16	·890	·860	·840	·837	·858	·858	·884	·894	·922	·944	·948	·928	·906	·878
17	·940	·930	·927	·916	·932	·932	·966	·978	30·016	30·024	30·026	30·008	·988	·970
18	·969	·951	·949	·947	·946	·944	·961	·968	29·987	29·991	29·987	29·967	·935	·904
19	·892	·879	·864	·847	·850	·862	·883	·902	·921	·929	·943	·919	·897	·871
20	·872	·857	·846	·833	·849	·859	·895	·909	·932	·929	·920	·891	·873	·851
21	·910	·895	·894	·887	·891	·891	·915	·935	·967	·977	·987	·961	·953	·935
22	·941	·927	·925	·913	·915	·927	·953	·963	·992	30·003	30·017	·997	·973	·951
23	·911	·901	·899	·883	·894	·889	·907	·925	·963	29·965	29·965	·941	·930	·898
24	·920	·906	·902	·891	·896	·898	·926	·932	·960	·968	·968	·950	·920	·893
25	·954	·938	·930	·918	·928	·936	·966	·976	30·000	30·006	30·016	·992	·970	·940
26	·952	·944	·941	·934	·940	·940	·964	·976	29·996	·005	·008	·987	·958	·932
27	·912	·897	·884	·880	·886	·894	·907	·923	·951	29·953	29·957	·947	·919	·887
28	·917	·901	·892	·880	·891	·895	·919	·937	·967	·966	·971	·943	·914	889
Mean .	29·920	29·904	29·896	29·885	29·892	29·895	29·919	29·933	29·961	29·966	**29·969**	29 947	29·926	29·899
Variation	+·008	—·008	—·016	—·027	—·020	—·017	+·007	+·021	+·049	+·054	**+·057**	+·035	+·014	—·013
Mean in milibars.	1013·20	1012·63	1012·40	1012·07	1012 27	1012·37	1013·20	1013·60	1014·63	1014·80	**1014·90**	1014·14	1013·40	1012·50
Variation in milibars.	+·26	—·31	—·54	—·87	—·67	—·57	+·26	+·66	+1·69	+1·86	**+1·96**	+1·20	+·46	—·44

JANUARY. (Averages for periods of sixty minutes from full hour to full hour of local mean time.)

(IN INCHES OF MERCURY AT 32° F.)

Hours.										Mean.		Maximum.		Minimum.		Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	Inches.	Milibar.	Time.	Mag.	Time.	Mag.	
												H. M.		H. M.		
29·913	29·903	29·910	29·917	29·947	29·960	29·975	29·971	29·967	29·949	29 959	1014·50	8 36	30·029	15 50	29·901	1
·880	·871	·882	·887	·913	·930	·949	·953	·955	·947	·935	13·67	9 15	·011	15 13	·869	2
·870	·849	·861	·871	·896	·921	·954	·959	·949	·939	923	13.30	8 58	29·982	15 30	·842	3
·889	·870	·879	·880	·907	·919	·938	·944	·934	·928	·934	13·63	8 45	30·023	15 56	·868	4
·853	·832	·853	·865	·877	·885	·901	·897	·902	·887	·905	12·67	8 51	29·991	15 50	·831	5
·811	**·802**	·814	·823	·848	·858	·882	·884	·884	·876	**·864**	**11·33**	9 5	·922	14 30	**·796**	6
·845	·844	·856	·865	·892	·902	·917	·913	·915	·898	·890	12·20	9 20	·952	15 10	·840	7
·849	·834	·843	·848	·875	·886	·904	·897	·898	·883	·888	12·17	8 45	·960	15 35	·832	8
·838	·834	·851	·860	·894	·902	·915	·911	·916	·907	886	12 10	9 5	·942	14 50	·830	9
·854	·844	·859	·869	·894	·904	·917	·917	·927	·921	·902	12·57	8 35	·967	14 50	·841	10
·866	·857	·876	·883	·912	·913	·928	·927	·926	·911	·917	13·14	9 5	·982	15 20	·854	11
·887	·875	·891	·896	·925	·932	·942	·942	·948	·935	·923	13·30	8 50	·983	15 35	·873	12
·900	·896	·913	·927	·961	·969	·987	·992	30·000	·994	·949	14·20	9 20	30·003	15 5	·894	13
·895	·878	·896	·903	·933	·944	·962	·964	29·974	·958	·952	14·27	8 40	·014	15 5	·876	14
·904	·888	·900	·900	·916	·941	·950	·954	·964	·957	·943	14·00	8 45	·008	15 58	·886	15
·867	·850	862	·874	·899	·908	·927	·928	·944	·942	926	13·40	8 45	29·990	16 10	·848	16
·906	·898	·906	·913	·938	·954	·970	·966	·975	·968	·945	14·07	8 50	30.002	16 5	·896	17
·915	·907	·909	·907	·923	·923	·941	·939	·945	·941	·953	14·30	8 55	·031	16 15	·905	18
·884	·874	·889	·889	·907	·917	·935	·933	·939	·930	·931	13·53	9 25	29·999	15 30	·873	19
·873	·861	·869	·865	·891	·901	·915	·909	·905	·899	·908	12·77	9 35	·975	15 50	·859	20
·884	·872	·877	·877	·905	·915	·931	·921	·917	·904	·913	13·00	9 55	·979	15 58	·871	21
·860	·848	·858	·861	·895	·911	·929	·924	·920	·904	·904	12·63	9 0	·961	15 59	·847	22
·893	·886	·895	·895	·915	·931	·949	·942	·946	·928	·919	13·20	9 10	·971	3 58	·879	23
·913	·899	·912	·909	·935	·945	·965	·961	·961	·945	·936	13·70	9 20	·993	3 15	·887	24
·921	·913	·925	·931	·957	·973	·995	·995	·994	·977	965	14·77	9 10	30·031	15 55	·911	25
·974	·963	·967	·972	·999	30·007	30·028	30·028	30·039	30·021	**30·005**	**16·07**	8 25	**·065**	3 57	·961	26
·935	·919	·929	·927	·951	29·965	29·991	29·991	29·993	29·983	29·985	15.37	8 48	·953	15 45	·917	27
·891	·878	·898	·898	·916	·921	·942	·942	·942	·932	·944	14·03	8 40	·004	15 10	·876	28
·878	·864	·872	·872	·892	·902	·923	·925	·922	·911	·912	12·97	9 50	29·976	16 10	·862	29
·899	·886	·890	·894	·924	·937	·957	·957	·960	·951	·932	13·57	9 2	·998	15 45	·884	30
·941	·928	·932	·938	·962	·976	30·004	30·008	39·018	30 004	·969	14·90	9 52	30·034	3 55	·904	31
29·886	**29·875**	29·886	29·891	29·916	29·927	29·946	29·945	29·948	29·937	29·930	1013·53					Mean.
—·044	**—·055**	—·044	—.039	—·014	—·003	+·016	+·015	+·018	+·007							Variation.
1012·10	**1011·67**	1012·10	1012·23	1013·10	1013·44	1014·10	1014·07	1014·17	1013·74							Mean in milibars
—1·43	**—1·86**	—1·43	—1·30	—·43	—·09	+·57	+·54	+·64	+·21							Variation in milibars

FEBRUARY.

29·959	29·958	29·961	29·964	29·975	29·991	30·014	30.014	30·018	30·012	**29·993**	**1015·67**	9 58	30·040	15 56	29·956	1
·921	·908	·910	·908	·910	·910	29·939	29·941	29·932	29·922	·959	14·50	9 10	**·042**	15 58	·906	2
·870	·858	·880	·887	·902	·904	·920	·926	·920	·904	·909	12·80	9 52	29·970	15 45	·856	3
·893	·873	·876	·876	·902	·902	·929	·930	·930	·915	·915	13·07	9 8	·982	16 5	·870	4
·848	·835	·841	·840	·854	·865	·894	·894	·904	·892	·893	12·30	9 30	·968	15 55	·834	5
·845	·833	·834	·834	·851	·873	·902	·911	·916	·897	·877	11·74	10 10	·942	16 15	·818	6
·854	·854	·873	·879	·907	·926	·959	·951	·942	·926	·891	12·23	20 46	·964	4 20	·834	7
·866	·848	·847	·847	·873	·874	·900	·899	·898	·881	·892	12·27	9 55	·968	4 6	·838	8
·849	·834	·833	·842	·866	·882	·911	·916	·920	·920	·884	12·03	9 40	·936	16 6	·820	9
·826	·818	·823	·824	·853	·868	·896	·901	·911	·896	·880	11·90	9 8	·935	15 55	·813	10
·863	·847	·849	·857	·876	·891	·910	·910	·919	·916	·894	12·33	8 35	·957	16 56	·839	11
·871	·844	·846	·849	·878	·885	·911	·917	·932	·921	·906	12·70	9 15	·981	15 58	·823	12
·916	·906	·910	·912	·944	·962	·984	·984	·984	·964	·938	13·77	21 25	·991	4 56	·886	13
·849	·824	·829	·829	·842	·853	876	·876	·886	·871	·908	12·77	9 20	·997	15 55	·821	14
·814	**·804**	·806	·808	·836	·848	·878	·888	·908	·900	**·859**	**11·10**	9 55	·918	16 20	**·802**	15
·851	·836	·850	·862	·890	·910	·939	·952	·965	·952	·894	12·33	22 15	·966	2 50	·834	16
·948	·928	·928	·928	·941	·952	·978	·978	·986	·978	·962	14·67	9 58	30·030	3 58	·914	17
·865	·845	·848	·848	·864	·874	·899	·899	·905	·901	·923	13·30	9 35	·001	16 25	·839	18
·857	·843	·849	·850	·857	·861	·893	·894	·891	·877	·880	11·90	10 12	29·945	16 15	·841	19
·839	·820	·829	·835	·861	·877	·907	·917	·924	·913	·877	11·74	9 5	·933	15 45	·817	20
·927	·909	·912	·912	·929	·939	·959	·953	·961	·951	·931	13·53	10 5	·989	3 45	·881	21
·917	·890	·893	·893	·899	·918	·943	·943	·945	·927	·910	13·00	10 0	30·017	16 20	·885	22
·873	·858	·867	·867	·889	·899	·931	·931	·933	·921	·910	12·90	9 5	29·977	15 52	·857	23
·877	·864	·878	·883	·916	·932	·961	·959	·967	·952	·922	13·27	9 45	·980	15 35	·862	24
·921	·908	·920	·920	·946	·954	·958	·960	·965	·950	·953	14·30	9 20	30·018	15 45	·906	25
·906	·886	·886	·886	·906	·906	·928	·928	·931	·916	·939	13·30	9 50	·012	16 4	·884	26
·869	·853	·859	·863	·882	·893	·917	·921	·925	·921	·904	12·63	9 55	29·965	16 5	·852	27
·861	·843	·855	·855	·867	·877	·907	·915	·914	·911	·904	12·63	10 32	·975	15 50	·841	28
29·877	**29·862**	29·868	29·870	29·890	29·901	29·927	29·929	29·933	29·922	29·912	1012·94					Mean.
—·035	**—·050**	—·044	—·042	—·022	—·011	+·015	+·017	+·021	+·010							Variation
1011·74	**1011·27**	1011·47	1011·50	1012·20	1012·53	1013·44	1013·50	1013·60	1013 27							Mean in milibars
—1·20	**—1·67**	—1·47	—1·44	—·74	—·41	+·50	+·56	+·66	+·33							Variation in milibars.

MARCH. (Averages for periods of sixty minutes from full hour to full hour of local mean time.)

(IN INCHES OF MERCURY AT 32° F.)

Date.	Hours.													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
1	29·908	29·890	29·884	29·878	29·878	29·879	29·903	29·927	29·959	29·959	29·950	29·927	29·900	29·860
2	·874	·859	·850	·844	·849	·861	·887	·898	·925	·931	·932	·914	·899	·880
3	·879	·856	·846	·844	·861	·868	·904	·926	·960	·968	·967	·945	·924	·90
4	·951	·933	·930	·920	·928	·926	·958	·974	30·006	30·009	30·014	·994	·972	·961
5	·960	·953	·950	·945	·947	·960	·980	·992	·018	·021	·015	·995	·972	·947
6	·938	·923	·900	·883	·892	·899	·923	·931	29·955	29·955	29·958	·933	·910	·889
7	·907	·886	·876	·863	·867	·873	·893	·903	·921	·919	·921	·894	·865	·829
8	·849	·829	·824	·812	·825	·854	·861	·874	·894	·903	·913	·893	·873	·857
9	·9 9	·888	·877	·873	·881	·884	·910	·921	·951	·956	·964	·950	·937	·916
10	·932	·910	·902	·899	·903	·916	·947	·966	·989	·989	·985	·964	·940	·909
11	·906	·894	·899	·894	·896	·909	·932	·955	·967	·968	·965	·945	·922	·893
12	·918	·907	·900	·892	·907	·912	·924	·936	·966	·972	·980	·938	·9 0	·896
13	·925	·913	·914	·907	·910	·919	·943	·956	·976	·970	·968	·952	·933	·917
14	·914	·897	·891	·891	·901	·907	·929	·942	·967	·972	·973	·952	·929	·904
15	·906	·891	·888	·883	·893	·898	·922	·939	·974	·982	·984	·963	·935	·900
16	·933	·920	·913	·909	·914	·920	·946	·965	·982	·979	·979	·952	·920	·896
17	·954	·934	·927	·919	·918	·933	·959	·972	·989	·985	·982	·954	·936	·905
18	·946	·927	·919	·907	·916	·932	·964	·981	·996	·992	·985	·966	·940	·907
19	·929	·909	·902	·894	·903	·909	·929	·935	·952	·949	·955	·928	·901	·873
20	·913	·897	·891	·885	·893	·896	·912	·925	·952	·951	·963	·943	·924	·906
21	·932	·911	·905	·893	·900	·914	·944	·957	·979	·980	·988	·970	·952	·925
22	·948	·925	·912	·899	·9 4	·915	·938	·954	·975	·981	·981	·955	·925	·900
23	·899	·889	·876	·863	·867	·882	·901	·911	·926	·922	·912	·893	·859	·826
24	·849	·840	·829	·821	·824	·831	·850	·866	·891	·885	·876	·854	·836	·794
25	·876	·856	·850	·839	·842	·851	·874	·893	·917	·915	·914	·897	·875	·851
26	·862	·847	·837	·825	·837	·847	·872	·887	·919	·919	·922	·900	·881	·860
27	·867	·849	·841	·836	·850	·857	·887	·899	·924	·924	·927	·909	·890	·861
28	·882	·861	·856	·841	·858	·868	·899	·920	·950	·949	·953	·936	·915	·893
29	·899	·880	·876	·867	·878	·885	·909	·916	·943	·938	·942	·920	·899	·863
30	·834	·815	·808	·799	·813	·823	·850	·869	·893	·885	·883	·853	·823	·790
31	·795	·774	·774	·775	·795	·807	·839	·855	·871	·869	·863	·842	·823	·789
Mean .	29·.03	29·886	29·879	29·871	29·879	29·888	29·913	29·927	29·951	29·952	29·951	29·930	29·907	29·881
Variation	+·006	—·011	—·018	—·026	—·018	—·009	+·016	+·030	+·054	+·055	+·054	+·033	+·010	—·016
Mean in milibars.	1012·60	1012·10	1011·80	1011 53	1011·80	1012 17	1013·00	1013·44	1014·23	1014·27	1014·23	1013·50	012·74	1011·93
Variation in milibars.	+·19	—·31	—·61	—·88	—·61	—·24	+ 59	+1·03	+1·82	+1·86	+1·82	+1·09	+·33	—·48

APRIL.

1	29·814	29·809	29·811	29·800	29·825	29·836	29·862	29·883	29·918	29·925	29·926	29·914	29·892	29 870
2	·901	·883	·885	·879	·887	·898	·912	·930	·947	·956	·971	·955	·934	·903
3	·892	·871	·871	·864	·880	·881	·908	·917	·933	·923	·918	·888	·861	·837
4	·821	·804	·804	·796	·810	·821	·850	·868	·894	·896	·900	·884	·871	·839
5	·861	·852	·842	·834	·835	·845	·861	·880	·911	·915	·914	·898	·871	·841
6	·873	·861	·861	·853	·870	·882	·901	·912	·938	·938	·937	·922	·904	·875
7	·9 0	·8 5	·863	·851	·855	·863	·879	·891	·914	·912	·916	·900	·879	·840
8	·8 4	·817	·808	·799	·808	·816	·839	·855	·875	·869	·874	·856	·843	·812
9	·837	·824	·824	·816	·831	·835	·857	·878	·907	·907	·908	·888	·861	·836
10	·825	·813	·809	·798	·815	·831	·860	·880	·891	·890	·879	·857	·838	·799
11	·824	·817	·841	·845	·859	·889	·910	·927	·937	·931	·930	·906	·878	·842
12	·851	·833	·822	·809	·817	·823	·849	·863	·884	·878	·868	·846	·819	·780
13	·842	·818	·803	·793	·799	·810	·826	·835	·851	·850	·854	·832	·811	·795
14	·824	·801	·790	·777	·792	·795	·811	·825	·850	·856	·857	·834	809	·781
15	·813	·794	·783	·771	·787	·803	·829	·843	·865	·866	·872	852	·829	·794
16	·787	·768	·760	·754	·769	·778	·802	·818	·844	·850	·855	·834	·817	·782
17	·796	·774	·776	·775	·791	·794	·817	·838	·858	·86	·866	·851	·833	·814
18	·796	·781	·773	·754	·765	·777	·811	·826	·851	·851	·843	·817	·792	·755
19	·815	·806	·796	·786	·794	·813	·820	·833	·852	·844	·831	·800	·768	·744
20	·755	·736	·736	·731	745	·758	·780	·795	·809	·805	·807	·785	·769	·739
21	·708	·729	·708	·691	·707	·712	·734	·749	·774	·774	·776	·759	·739	·713
22	·736	·717	710	·699	·706	·715	·738	·751	·781	·779	·780	·760	·738	·703
23	·758	·740	·723	·707	707	·713	·760	·775	·796	·801	·802	·779	·759	·727
24	771	·762	·743	·755	·773	·780	·804	·820	·840	·840	·833	·812	·782	·742
25	·739	·731	·732	·733	·745	·762	·790	·809	·836	·838	·835	·811	·787	·751
26	·778	·761	·749	·730	748	·761	·789	·810	·838	·838	·836	·827	·810	·776
27	·793	·773	·773	·763	·780	·788	·812	·822	·843	·838	·850	·829	·801	·768
28	·73	·714	·712	·703	·722	·736	·768	·786	·806	·804	·807	·787	·760	·728
29	·793	·788	·785	·775	·793	·797	·814	·820	·833	·828	·824	·805	·782	·751
30	·776	·781	783	·771	770	·779	·800	·806	·818	·816	·807	·789	·777	·750
Mean .	28·810	29·795	29·790	29·781	29·793	29·802	29·827	29·841	29·863	29·863	29·863	29·843	29·821	29·790
Variation	+·007	—·008	— 013	·022	—·010	—·001	+.024	+·038	+·060	+·060	+·060	+·040	+·018	—·013
Mean in milibars.	1009·50	1008·97	1008·80	1008·53	008 ·0	1009·17	1010·04	1010·53	1011·30	1011·30	1011·30	1010·60	1009·83	1008 80
Variation in milibars.	+ 25	—·28	—·45	— 72	—·35	—·08	+·79	+1·28	+2 05	+2·05	+2·05	+1·35	+·58	—·45

MARCH. (*Averages for periods of sixty minutes from full hour to full hour of local mean time.*)

(IN INCHES OF MERCURY AT 32° F.)

Hours.										Mean.		Maximum.		Minimum.		Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	Inches.	Millibars	Time.	Mag.	Time.	Mag.	
												H. M.		H. M.		
29·834	29·818	29·829	29·836	29·854	29·865	29·893	29·899	29·900	29·888	29·888	1012·17	9 22	29·964	15 52	29·816	1
·859	·841	·846	·846	·868	·874	·894	·892	·892	·877	·879	11·80	9 12	·934	15 58	·840	2
·888	·876	·896	·904	·923	·932	·958	·958	·962	·958	·913	13·00	9 40	·972	3 55	·842	3
·930	·908	·918	·921	·941	·948	·967	·972	·973	·966	·955	14·37	8 55	30·016	15 50	·906	4
·920	·902	·908	·903	·917	·926	·944	·956	·956	·946	**·956**	**14·40**	9 50	**·026**	15 50	·900	5
·872	·853	·864	·864	·880	·891	·916	·918	·922	·908	·907	12·74	9 15	29·958	15 50	·851	6
·808	·785	·792	·800	·827	·841	·864	·868	·871	·859	·864	11·33	9 0	·925	15 50	·781	7
·835	·821	·829	·829	·854	·872	·899	·909	·917	·909	·863	11·30	10 0	·926	3 0	·808	8
·894	·880	·890	·898	·921	·933	·950	·954	·950	·942	·918	13·17	10 20	·967	2 37	·869	9
·881	·862	·869	·873	·884	·893	·917	·926	·924	·909	·920	13·20	10 0	·993	15 58	·859	10
·860	·846	·850	·856	·875	·889	·920	·931	·932	·922	·909	12·80	9 15	·975	15 48	·845	11
·872	·859	·865	·864	·883	·896	·924	·927	·927	·918	·912	12·97	9 15	·974	15 53	·854	12
·900	·885	·887	·883	·903	·908	·923	·923	·924	·923	·923	13·30	8 30	·977	17 15	·881	13
·884	·867	·865	·863	·879	·881	·899	·906	·916	·909	·910	12·90	9 27	·975	15 45	·861	14
·887	·865	·871	·871	·892	·905	·925	·932	·939	·931	·916	13·10	10 20	·985	15 54	·857	15
·879	·868	·877	·888	·912	·933	·959	·968	·977	·965	·931	13·53	8 40	·988	15 10	·852	16
·875	·867	·870	·880	·895	·914	·943	·950	·957	·946	·932	13·67	8 50	·991	16 40	·853	17
·876	·845	·848	·853	·877	·888	·918	·930	·942	·929	·924	13·33	8 0	·997	15 52	·841	18
·855	·838	·849	·851	·879	·892	·919	·929	·934	·919	·906	12·70	8 45	·957	15 20	·835	19
·891	·873	·877	·884	·904	·917	·934	·934	·940	·932	·914	13·03	10 0	·971	15 30	·869	20
·903	·884	·887	·890	·919	·937	·953	·962	·976	·963	·934	13·63	10 0	·989	16 0	·877	21
·874	·850	·853	·855	·876	·887	·911	·919	·923	·909	·915	13·07	9 30	·986	16 10	·838	22
·867	·795	·798	·803	·820	·839	·864	·872	·870	·861	·845	11·37	8 15	·932	15 56	·784	23
·788	·778	·803	·818	·854	·867	·892	·903	·911	·897	·848	10·77	21 55	·912	15 10	·774	24
·840	·825	·832	·832	·859	·870	·885	·883	·880	·863	·867	11·44	8 35	·920	15 55	·820	25
·845	·832	·834	·835	·854	·862	·886	·886	·890	·878	·867	11·44	9 30	·923	3 46	·817	26
·842	·826	·833	·833	·853	·860	·881	·885	·892	·884	·871	11·53	10 10	·930	15 35	·820	27
·864	·847	·844	·849	·872	·883	·915	·921	·926	·908	·892	12·27	10 12	·956	3 55	·834	28
·837	·806	·808	·805	·822	·831	·858	·858	·861	·842	·873	11·60	8 50	·946	16 4	·798	29
·764	·743	·741	**·739**	·763	·774	·801	·810	·817	·803	**·812**	**09·67**	8 50	·896	15 58	**·734**	30
·766	·747	·756	·763	·797	·817	·847	·853	·853	·827	·812	09·57	9 10	·872	15 48	·738	31
29·859	**29·842**	29·848	29·851	29·873	29·885	29·908	29·914	29·918	29·906	29·897	1012·94					Mean.
—·038	**—·055**	—·049	—·046	—·024	—·012	+·011	+·017	+·021	+·009							Variation.
1011·10	**1010·57**	1010·77	1010·83	1011·60	1012·07	1012·77	1013·03	1013·17	1012·70							Mean in millibars
—1·31	**—1·84**	—1·64	—1·58	—·81	—·34	+·36	+·62	+·76	+·29							Variation in millibars

APRIL.

29·847	29·825	29·820	29·823	29·847	29·870	29·899	29·909	29·919	29·913	29·865	1011 37	9 5	29·928	3 40	29·794	1
·869	·852	·844	·837	·858	·873	·897	·904	·909	·897	**·899**	**12·50**	9 58	**·974**	17 30	·834	2
·810	·788	·785	·773	·786	·793	·811	·815	·835	·823	·853	10·90	8 45	·936	17 15	·770	3
·824	·806	·806	·805	·822	·836	·861	·869	·876	·865	·843	10·60	9 5	·903	3 5	·793	4
·825	·804	·804	·802	·825	·837	·860	·868	·882	·876	·856	11·00	9 5	·917	16 52	·799	5
·858	·837	·837	·835	·859	·868	·892	·903	·920	·911	·885	12·07	8 50	·946	16 15	·826	6
·821	·797	·794	·783	·799	·811	·836	·838	·849	·841	·854	10·93	9 46	·918	17 10	·778	7
·794	·777	·780	·781	·805	·816	·838	·842	·852	·838	·826	10·00	8 55	·881	16 37	·771	8
·809	·794	·793	·791	·811	·820	·840	·850	·853	·836	·842	10·57	9 5	·918	17 35	·782	9
·777	·751	·755	·754	·782	·796	·826	·834	·843	·831	·822	09·87	8 50	·894	15 10	·748	10
·817	·792	·790	·784	·811	·828	·850	·856	·860	·848	·857	11·04	8 8	·941	17 20	·779	11
·752	·732	·732	·740	·772	·788	·819	·833	·860	·852	·818	09·77	8 35	·886	16 35	·722	12
·774	·749	·750	·764	·791	·802	·826	·824	·837	·822	·811	09·53	10 5	·859	16 20	·743	13
·765	·741	·736	·738	·767	·785	·809	·819	·832	·819	·801	09·13	9 30	·864	16 18	·728	14
·772	·754	·751	·744	·763	·779	·797	·806	·811	·799	·803	09·20	10 12	·876	17 50	·740	15
·759	·739	·734	·734	·758	·766	·791	·802	·816	·804	·788	08·77	9 22	·859	16 58	·725	16
·788	·764	·762	·756	·766	·779	·798	·808	·814	·800	·803	09·20	9 10	·871	17 58	·753	17
·737	·718	·715	·716	·731	·750	·780	·790	·806	·811	·781	08·53	8 55	·855	17 8	·709	18
·723	·703	·693	·683	·704	·715	·745	·760	·771	·759	·773	08·20	8 40	·855	17 8	·677	19
·725	·705	·709	·709	·722	·732	·762	·773	·784	·770	·756	07·70	9 42	·814	16 2	·698	20
·691	**·671**	·674	·674	·691	·699	·720	·730	·739	·737	**·723**	**06·50**	9 40	·779	17 58	·655	21
·683	·671	·671	·679	·712	·720	·751	·758	·767	·761	·729	06·70	8 56	·785	16 35	·663	22
·711	·695	·694	·699	·722	·736	·764	·771	·781	·771	·745	07·27	9 10	·805	16 18	·687	23
·710	·681	·671	·673	·687	·702	·733	·741	·746	·734	·756	07·70	7 8	·848	16 58	**·662**	24
·727	·704	·700	·702	·727	·749	·772	·782	·785	·780	·764	07·93	9 18	·846	16 10	·688	25
·755	·728	·724	·721	·751	·766	·800	·813	·823	·808	·781	08·53	9 10	·843	17 4	·717	26
·748	·726	·719	·712	·735	·753	·773	·769	·766	·748	·778	08·37	9 58	·855	17 5	·707	27
·709	·688	·684	·688	·712	·724	·745	·760	·781	·767	·743	07·20	8 57	·809	16 27	·679	28
·720	·706	·696	·696	·716	·728	·756	·770	·782	·772	·773	08·20	8 56	·837	16 46	·691	29
·727	·697	695	·697	·723	·741	·781	·791	·796	·784	·769	08·10	9 22	·823	16 58	·689	30
29·768	29·747	29·744	**29·743**	29·765	29·779	29·804	29·813	29·823	29·813	29·803	1009·25					Mean.
—·035	—·056	— 059	**—·060**	— 038	—·024	+·001	+·010	+·020	+·010							Variation.
1008 07	1007 34	1007 23	**1007·20**	1007 97	1008·40	1009·23	1009 60	1009·90	1009·60							Mean in millibars
—1·18	—1·91	—2·02	**—2·05**	—1·28	—·85	—·02	+·35	+·65	+·35							Variation in millibars

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY. (IN INCHES OF MERCURY AT 32° F.)

Date.	Hours.													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
1	29·781	29·774	29·771	29·766	29·773	29·767	29·789	29·799	29·815	29·815	29·816	29·802	29·776	29·758
2	·744	·734	·717	·703	·711	·720	·754	·770	·797	·789	·787	·772	·754	·721
3	·703	·689	·681	·670	·680	·685	·710	·730	·761	·766	·778	·766	·754	·727
4	·716	·704	·700	·691	·702	·710	·736	·755	·782	·790	·796	·787	·781	·761
5	·772	·754	·746	·735	·749	·754	·783	·798	·815	·818	·822	·802	·783	·768
6	·777	·752	·748	·729	·738	·742	·768	·782	·805	·808	·814	·802	·789	·760
7	·748	·734	·730	·726	·728	·732	·746	·760	·783	·783	·783	·765	·748	·719
8	·731	·704	·699	·697	·706	·716	·741	·758	·781	·779	·787	·781	·771	·747
9	·726	·704	·706	·689	·706	·706	·744	·750	·771	·768	·768	·752	·748	·727
10	·724	·702	·693	·690	·708	·720	·750	·768	·786	·788	·786	·776	·766	·735
11	·763	·744	·732	·722	·738	·740	·764	·774	·800	·804	·814	·803	·787	·765
12	·772	·751	·747	·737	·754	·770	·796	·814	·836	·838	·838	·816	·799	·769
13	·789	·770	·764	·764	·782	·791	·816	·826	·842	·840	·837	·828	·826	·800
14	·814	·784	·774	·760	·770	·781	·819	·836	·858	·864	·864	·839	·834	·804
15	·811	·792	·794	·793	·799	·805	·828	·846	·867	·867	·871	·860	·847	·814
16	·793	·773	·770	·767	·779	·783	·806	·821	·834	·828	·833	·823	·803	·767
17	·781	·764	·763	·758	·771	·780	·802	·815	·841	·845	·850	·838	·828	·802
18	·816	·798	·801	·797	·811	·822	·845	·855	·873	·876	·880	·860	·848	·823
19	·805	·789	·791	·788	·802	·815	·841	·854	·870	·868	·871	·855	·842	·813
20	·813	·793	·791	·790	·805	·817	·843	·857	·870	·876	**·883**	·865	·849	·814
21	·813	·790	·791	·785	·800	·801	·825	·837	·852	·848	·849	·827	·813	·799
22	·795	·779	·773	·767	·782	·791	·814	·825	·846	·848	·851	·834	·819	·790
23	·798	·775	·764	·752	·761	·759	·786	·802	·817	·813	·808	·789	·782	·765
24	·726	·706	·699	·695	·712	·726	·747	·768	·802	·815	·817	·801	·793	·775
25	·740	·738	·743	·736	·739	·745	·782	·786	·799	·798	·792	·776	·762	·743
26	·768	·745	·745	·745	·759	·761	·783	·791	·809	·809	·808	·790	·779	·751
27	·756	·740	·734	·737	·750	·765	·789	·803	·825	·825	·819	·800	·780	·766
28	·734	·715	·703	·698	·712	·722	·750	·767	·781	·782	·784	·777	·761	·733
29	·770	·755	·749	·734	·747	·753	·797	·803	·826	·826	·825	·810	·795	·762
30	·781	·758	·756	·750	·759	·772	·791	·818	·834	·839	·834	·814	·806	·776
31	·773	·765	·778	·771	·779	·783	·809	·819	·829	·820	·817	·792	·769	·748
Mean .	29·769	29·750	29·747	29·740	29·752	29·759	29·786	29·800	29·820	29·820	**29·822**	29·810	29·793	29·768
Variation.	—·001	—·020	—·023	—·030	—·018	—·011	+·016	+·030	+·050	+·050	**+·052**	+·040	+·023	—·002
Mean in milibars.	1008·10	1007·50	1007·34	1007·34	1007·67	1007·80	1008·70	1009·10	1009·80	1009·80	**1009·87**	1009·50	1008·90	1008·07
Variation in milibars.	—·03	—·63	—·79	—1·03	—·56	—·33	+·57	+·97	+1·67	+1·67	**+1·74**	+1·37	+·77	—·06

JUNE.

1	29·777	29·761	29·753	29·741	29·754	29·761	29·781	29·785	29·801	29·797	29·704	29·779	29·769	29·730
2	·740	·733	·738	·735	·743	·742	·759	·763	·774	·768	·777	·760	·753	·714
3	·735	·722	·708	·702	·706	·713	·727	·729	·736	·731	·729	·715	·705	·680
4	·681	·661	·659	·661	·678	·683	·701	·712	·722	·713	·719	·702	·690	·667
5	·676	·677	·686	·680	·688	·691	·703	·713	·722	·715	·716	·696	·679	·655
6	·671	·656	·657	·655	·670	·679	·700	·709	·729	·728	·721	·709	·691	·680
7	·660	·640	·644	·637	·652	·663	·683	·697	·714	·714	·713	·694	·687	·665
8	·678	·664	·670	·657	·667	·679	·705	·717	·733	·723	·724	·705	·702	·684
9	·691	·679	·680	·680	·701	·711	·734	·755	·775	·777	·776	·760	·755	·733
10	·738	·729	·737	·736	·751	·758	·785	·794	·814	**·815**	·812	·784	·766	·742
11	·707	·685	·681	·682	·689	·691	·709	·717	·732	·724	·718	·704	·684	·668
12	·656	·635	·633	·633	·650	·653	·683	·687	·699	·699	·708	·692	·680	·666
13	·636	·624	·628	·619	·619	·624	·644	·663	·676	·680	·692	·666	·664	·658
14	·622	·610	·593	·601	·606	·607	·616	·632	·668	·680	·686	·665	·658	·641
15	·626	·617	·617	·610	·616	·623	·660	·672	·690	·693	·699	·681	·674	·646
16	·684	·677	·673	·668	·681	·684	·709	·712	·730	·727	·734	·710	·707	·686
17	·692	·681	·674	·668	·678	·680	·702	·709	·723	·727	·724	·712	·697	·681
18	·684	·661	·662	·653	·665	·670	·683	·693	·707	·705	·708	·698	·702	·688
19	·680	·666	·669	·663	·669	·675	·697	·708	·732	·730	·731	·714	·704	·672
20	·728	·712	·685	·656	·666	·679	·697	·709	·733	·732	·738	·717	·720	·707
21	·716	·702	·701	·693	·701	·704	·726	·734	·751	·754	·757	·743	·737	·716
22	·718	·703	·704	·679	·689	·705	·731	·740	·748	·751	·752	·737	·720	·707
23	·709	·684	·685	·677	·689	·703	·721	·726	·755	·753	·752	·737	·729	·704
24	·703	·684	·681	·673	·691	·702	·724	·732	·744	·742	·750	·739	·726	·707
25	·710	·694	·690	·683	·688	·688	·713	·721	·729	·728	·731	·718	·704	·684
26	·683	·661	·644	·631	·634	·634	·657	·664	·677	·677	·681	·663	·643	·627
27	·649	·630	·628	·618	·627	·636	·636	·664	·678	·674	·682	·667	·657	·630
28	·654	·637	·628	·618	·624	·633	·655	·674	·696	·698	·704	·695	·673	·651
29	·638	·608	·607	·600	·609	·609	·636	·644	·663	·665	·671	·664	·655	·632
30	·662	·645	·630	·619	·630	·627	·637	·645	·662	·666	·668	·662	·658	·645
Mean .	29·687	29·671	29·668	29·661	29·671	29·677	29·697	29·707	29·724	29·723	**29·726**	29·710	29·700	29·679
Variation.	+·003	—·013	—·016	—·023	—·013	—·007	+·013	+·023	+·040	+·039	**+·042**	+·026	+·016	—·005
Mean in milibars.	1005·34	1004·73	1004·67	1004·43	1004·73	1004·94	1005·64	1006·04	1006·53	1006·50	**1006·60**	1006·10	1005·80	1005·00
Variation in milibars.	+·15	—·46	—·52	—·76	—·46	—·25	+·45	+·85	+1·34	+1·31	**+1·41**	+·91	+·61	—·19

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY. (IN INCHES OF MERCURY AT 32° F.)

Hours.										Mean.		Maximum.		Minimum.		Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	Inches.	Millibars.	Time.	Mag.	Time.	Mag.	
												H. M.		H. M.		
29·734	29·708	29·701	29·701	29·722	29·729	29·743	29·750	29·764	29·755	29·763	1007·90	9 18		29·819	16 40	29·697	1
·702	·681	·677	·671	·683	·689	·710	·709	·722	·710	·726	06·60	8 55		·800	17 40	**·664**	2
·714	·695	·690	·688	·699	·702	·726	·728	·734	·720	**·717**	**06 34**	10 30		·780	3 30	·664	3
·754	·736	·736	·738	·747	·759	·775	·778	·792	·778	·750	07·50	9 23		·811	3 36	·683	4
·748	·728	·732	·726	·741	·751	·776	·778	·790	·782	·769	08·10	9 15		·833	17 50	·723	5
·735	·717	·713	·713	·727	·736	·756	·765	·773	·765	·759	07·80	9 40		·819	16 10	·709	6
·699	·688	·693	·698	·713	·718	·729	·738	·744	·737	·735	06·97	9 5		·788	16 52	·684	7
·718	·702	·701	·696	·707	·712	·727	·734	·750	·736	·733	06 90	10 32		·790	18 22	·692	8
·702	·686	·681	·684	·698	·706	·732	·736	·734	·726	·723	06·50	8 35		·778	16 50	·676	9
·718	·705	·705	·710	·738	·756	·772	·772	·778	·768	·742	07·17	9 10		·792	3 0	·684	10
·745	·729	·725	·729	·751	·769	·786	·789	·795	·777	·764	07 93	10 12		·818	3 26	·718	11
·749	·731	·732	·739	·762	·774	·803	·806	·815	·806	·781	08·53	8 55		·843	16 10	·719	12
·782	·760	·758	·762	·784	·796	·818	·832	·846	·838	·806	09·30	22 25		·849	16 15	·751	13
·796	·783	·785	·791	·807	·816	·832	·831	·836	·819	·813	09·00	8 58		·867	3 55	·753	14
·791	·769	·765	·765	·782	·784	·799	·798	·806	·794	·810	09 50	8 55		·872	16 55	·762	15
·755	·734	·736	·737	·754	·759	·783	·796	·803	·789	·784	08·63	8 40		·837	15 58	·731	16
·784	·763	·761	·761	·782	·795	·815	·819	·831	·820	·799	09·10	9 45		·851	16 10	·749	17
·814	·790	·785	·774	·789	·796	·815	·817	·827	·813	**·822**	**09·87**	9 40		·882	17 30	·770	18
·794	·771	·769	·767	·788	·791	·817	·823	·832	·820	·816	09·70	8 40		·874	16 35	·764	19
·830	·780	·779	·778	·790	·809	·832	·830	·835	·821	·822	09·87	9 45		**·883**	16 35	·773	20
·782	·761	·762	·768	·782	·790	·807	·806	·814	·807	·805	09·27	8 50		·857	16 32	·757	21
·776	·759	·757	·752	·756	·774	·806	·809	·821	·809	·797	09·04	9 45		·855	17 58	·747	22
·742	·719	·720	·709	·713	·714	·739	·746	·752	·735	·761	07·83	8 50		·822	17 55	·704	23
·759	·740	·740	·732	·740	·745	·759	·771	·776	·753	·754	07 63	9 30		·823	2 50	·691	24
·728	·709	·712	·714	·728	·754	·776	·779	·792	·780	·756	07 70	9 25		·807	16 4	·705	25
·740	·730	·731	·731	·743	·751	·772	·766	·774	·759	·764	07·93	9 15		·817	16 40	·725	26
·741	·717	·709	·708	·712	·714	·732	·745	·762	·747	·757	07·74	8 56		·831	16 50	·701	27
·721	·695	·698	·709	·715	·723	·751	·769	·783	·777	·740	07·10	9 15		·789	16 25	·691	28
·738	·708	·705	·705	·712	·723	·760	·779	·789	·782	·765	07·97	9 5		·829	16 35	·699	29
·758	·733	·731	·718	·732	·737	·762	·772	·784	·775	·775	08·27	9 10		·843	17 45	·713	30
·719	·689	·689	·711	·741	·738	·754	·759	·779	·781	·767	08 04	8 20		·835	16 50	·683	31
29·750	29·730	**29·728**	29·728	29·743	29·752	29·773	29·778	29·788	29·777	29·770	1008·13						Mean.
—·029	—·040	**—·042**	—·042	—·027	—·018	+·003	+·008	+·018	+·007								Variation.
1007 50	1006·80	**1006·67**	1006·67	1007·20	1007·57	1008·20	1008·37	1008·77	1008·34								Mean in millibars.
—·63	—1·33	**—1·46**	—1·46	—·93	—·56	+·07	+·24	+·64	+·21								Variation in millibars.

JUNE.

29·714	29·716	29·746	29·760	29·732	29·721	29·720	29·738	29·750	29·742	**29·755**	**1007·67**	8 12		29·804	14 42	29·708	1
·688	·672	·665	·663	·692	·708	·713	·724	·743	·740	·729	06·70	8 58		·778	16 58	·656	2
·664	·631	·634	·621	·634	·646	·670	·673	·680	·665	·690	05·40	8 7		·742	18 5	·620	3
·648	·626	·610	·601	·634	·641	·678	·701	·716	·709	·675	04·87	7 45		·725	17 18	·597	4
·645	·632	·635	·631	·654	·662	·680	·683	·693	·680	·679	07·00	8 48		·726	16 12	·626	5
·659	·632	·628	·623	·641	·651	·669	·673	·683	·672	·674	04·83	9 28		·735	17 35	·617	6
·651	·628	·630	·623	·645	·656	·675	·679	·697	·683	·668	04·67	9 10		·720	16 10	·626	7
·663	·636	·636	·632	·654	·668	·698	·702	·707	·699	·683	05·20	8 15		·736	17 5	·630	8
·722	·701	·702	·695	·716	·726	·744	·744	·752	·744	·727	06·64	9 35		·782	2 48	·674	9
·725	·703	·705	·701	·714	·729	·742	·739	·736	·725	·749	07·40	9 2		**·820**	17 45	·696	10
·651	·629	·631	·626	·636	·654	·671	·677	·683	·670	·680	05·10	8 30		·738	17 30	·620	11
·654	·626	·613	·619	·641	·645	·670	·667	·670	·648	·659	04·40	9 58		·713	16 53	·608	12
·638	·610	·598	·592	·610	·616	·622	·623	·635	·628	·637	03·64	10 30		·698	16 55	·586	13
·628	·605	·587	·597	·633	·638	·661	·672	·677	·657	**·635**	**03·57**	10 40		·694	16 30	·582	14
·646	·620	·616	·627	·654	·662	·687	·688	·694	·685	·654	04·23	10 8		·704	3 55	·604	15
·671	·656	·650	·651	·667	·683	·697	·702	·708	·701	·690	05·10	10 10		·740	16 18	·644	16
·664	·646	·645	·646	·660	·670	·685	·686	·702	·690	·685	05·27	9 30		·732	16 40	·640	17
·660	·640	·645	·641	·661	·667	·684	·681	·698	·691	·677	04·94	9 45		·712	16 12	·634	18
·667	·643	·646	·653	·666	·684	·701	·705	·723	·722	·688	05·37	8 52		·741	15 55	·637	19
·693	·673	·677	·669	·685	·696	·716	·724	·736	·727	·703	05·90	10 5		·740	3 35	·650	20
·710	·693	·689	·690	·710	·711	·731	·739	·741	·730	·720	06·40	9 52		·758	16 44	·682	21
·692	·676	·682	·680	·699	·711	·733	·733	·736	·717	·714	06·23	9 18		·757	15 55	·671	22
·692	·676	·675	·670	·689	·696	·715	·714	·716	·708	·707	06·04	9 30		·758	16 55	·666	23
·701	·680	·680	·680	·698	·708	·720	·732	·740	·724	·711	06·13	10 58		·752	3 10	·666	24
·674	·658	·649	·641	·658	·666	·682	·694	·704	·690	·692	05·47	8 55		·732	17 7	·636	25
·622	·604	·611	·611	·629	·638	·664	·672	·680	·662	·649	04·00	9 26		·681	15 14	·601	26
·616	·585	·592	·597	·622	·638	·654	·657	·674	·647	·641	03·73	9 48		·684	15 35	·581	27
·623	·584	·587	**·579**	·596	·612	·644	·642	·654	·653	·642	03·77	10 52		·709	17 48	**·573**	28
·621	·589	·597	·599	·628	·643	·661	·669	·683	·666	·636	03·60	22 10		·684	2 7	·573	29
·642	·636	·636	·629	·642	·654	·686	·694	·706	·695	·653	04·20	22 5		·706	3 5	·614	30
29·665	29·644	29·643	**29·642**	29·660	29·670	29·689	29·694	29·704	29·693	29·684	1005·19						Mean.
—·119	—·140	—·141	**—·042**	—·024	—·014	+·005	+·010	+·020	+·009								Variation.
1004·57	1003 83	1003·80	**1003·77**	1004·40	1004·70	1005 40	1005·53	1005·93	1005 50								Mean in millibars.
—·62	—1·36	—1·39	**—1·42**	—·79	—·49	+·21	—·34	+·74	+·31								Variation in millibars.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JULY. (IN INCHES OF MERCURY AT 32°F.)

Date.	Hours.													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
1	29·687	29·671	29·657	29·638	29·648	29·645	29·662	29·661	29·665	29·663	29·665	29·636	29·624	29·602
2	·531	·493	·472	·449	·460	·460	·469	·458	·464	·459	·480	·478	·485	·490
3	·490	·470	·469	·459	·468	·486	·520	·530	·549	·550	·556	·542	·536	·516
4	·526	·499	·498	·492	·502	·505	·536	·546	·564	·566	·584	·570	·574	·556
5	·556	·535	·539	·535	·535	·548	·574	·586	·595	·593	·599	·593	·597	·587
6	·668	·645	·648	·649	·673	·675	·699	·720	·744	·747	·761	·740	·720	·718
7	·715	·692	·684	·676	·688	·693	·720	·732	·736	·732	·726	·708	·702	·682
8	·645	·621	·623	·609	·621	·619	·643	·653	·672	·669	·675	·659	·658	·635
9	·626	·602	·600	·596	·610	·618	·644	·652	·670	·662	·672	·652	·652	·635
10	·666	·652	·648	·642	·650	·656	·673	·678	·698	·702	·709	·690	·685	·680
11	·682	·659	·639	·643	·651	·662	·674	·679	·694	·707	·715	·703	·697	·679
12	·662	·641	·633	·618	·631	·639	·660	·666	·687	·688	·695	·670	·657	·638
13	·636	·612	·610	·600	·609	·620	·642	·658	·668	·668	·682	·662	·654	·646
14	·651	·629	·616	·611	·619	·627	·651	·658	·673	·676	·686	·672	·672	·662
15	·657	·641	·627	·622	·628	·632	·657	·669	·685	·690	·698	·691	·684	·664
16	·687	·670	·665	·657	·665	·665	·677	·687	·704	·697	·701	·686	·679	·669
17	·656	·634	·626	·613	·611	·615	·637	·651	·666	·659	·669	·649	·646	·630
18	·666	·647	·649	·647	·663	·666	·691	·702	·729	·726	·729	·718	·713	·713
19	·732	·720	·722	·720	·724	·724	·732	·743	·768	·763	·765	·756	·750	·738
20	·701	·676	·665	·651	·653	·656	·669	·674	·686	·682	·686	·671	·662	·644
21	·647	·626	·614	·613	·629	·642	·663	·679	·701	·699	·699	·684	·689	·679
22	·666	·650	·652	·645	·665	·672	·701	·711	·733	·735	·745	·734	·734	·716
23	·710	·682	·673	·669	·686	·690	·717	·722	·742	·743	·752	·742	·740	·715
24	·685	·659	·640	·628	·644	·646	·673	·673	·685	·686	·689	·666	·663	·664
25	·661	·631	·632	·622	·634	·645	·666	·664	·689	·684	·682	·674	·667	·652
26	·660	·633	·632	·625	·635	·645	·668	·670	·690	·684	·682	·661	·649	·612
27	·661	·642	·631	·616	·628	·634	·653	·666	·681	·682	·685	·673	·663	·649
28	·701	·674	·661	·651	·655	·666	·690	·703	·732	·730	·729	·711	·705	·682
29	·684	·659	·648	·639	·645	·646	·668	·672	·696	·687	·691	·681	·687	·671
30	·649	·621	·611	·595	·602	·603	·617	·630	·655	·657	·661	·643	·643	·625
31	·647	·627	·620	·611	·615	·619	·635	·652	·686	·694	·700	·685	·691	·663
Mean .	29·652	29·629	29·623	29·614	29·624	29·630	29·651	29·660	29·678	29·677	29·683	29·668	29·664	29·649
Variation.	+·004	—·019	—·025	—·034	—·024	—·018	+·003	+·012	+·030	+·029	+·035	+·020	+·016	+·001
Mean in milibars.	1004·17	1003·40	1003·20	1002·83	1003·23	1003·40	1004·13	1004·40	1004·97	1004·94	1005·20	1004·67	1004·53	1004·00
Variation in milibars.	+·16	—·61	—·81	—1·18	—·78	—·61	+·12	+·39	+·96	+·93	+1·19	+·66	+ 52	—·01

AUGUST.

1	29·672	29·654	29·641	29·624	29·626	29·636	29·668	29·691	29·722	29·722	29·722	29·704	29·700	29·682
2	·688	·669	·674	·665	·680	·681	·704	·713	·731	·733	·732	·713	·696	·674
3	·658	·636	·636	·628	·642	·650	·675	·684	·701	·693	·700	·688	·682	·664
4	·673	·659	·657	·649	·655	·653	·671	·683	·693	·687	·685	·682	·669	·649
5	·649	·623	·614	·611	·615	·615	·633	·639	·662	·657	·667	·649	·629	·601
6	·592	·556	·548	·534	·539	·544	·575	·589	·615	·615	·624	·598	·592	·568
7	·573	·547	·538	·534	·543	·546	·569	·580	·597	·595	·600	·586	·571	·550
8	·552	·526	·508	·498	·508	·514	·535	·544	·564	·558	·559	·541	·534	·506
9	·528	·503	·497	·488	·504	·517	·546	·551	·588	·588	·599	·579	·567	·545
10	·601	·579	·581	·579	·595	·608	·637	·653	·679	·679	·681	·677	·666	·643
11	·687	·665	·664	·653	·661	·665	·683	·691	·714	·708	·709	·696	·687	·679
12	·652	·630	·622	·608	·625	·627	·650	·660	·781	·679	·683	·671	·657	·633
13	·636	·611	·610	·598	·613	·614	·636	·644	·658	·658	·668	·645	·640	·612
14	·611	·591	·575	·569	·578	·585	·604	·614	·622	·620	·630	·615	·603	·579
15	·588	·566	·557	·547	·559	·563	·576	·583	·605	·599	·601	·585	·573	·561
16	·570	·551	·547	·540	·554	·550	·574	·588	·613	·614	·624	·610	·595	·572
17	·548	·533	·531	·518	·531	·537	·553	·572	·586	·585	·594	·581	·573	·553
18	·545	·528	·525	·511	·529	·532	·556	·566	·582	·583	·585	·575	·566	·545
19	·617	·601	·593	·590	·609	·620	·636	·645	·665	·668	·675	·655	·646	·619
20	·632	·618	·610	·606	·620	·618	·638	·648	·674	·677	·679	·664	·646	·622
21	·618	·598	·600	·588	·596	·600	·627	·642	·668	·676	·671	·663	·655	·634
22	·622	·605	·597	·591	·598	·602	·621	·621	·634	·643	·649	·631	·624	·608
23	·599	·575	·579	·572	·589	·595	·621	·634	·646	·645	·647	·738	·629	·603
24	·596	·590	·594	·586	·600	·610	·632	·638	·674	·676	·671	·663	·653	·627
25	·689	·663	·669	·669	·683	·682	·709	·719	·743	·749	·759	·745	·736	·708
26	·760	·741	·724	·710	·714	·713	·730	·745	·760	·759	·753	·747	·727	·705
27	·695	·671	·663	·657	·672	·671	·691	·704	·722	·724	·727	·717	·703	·681
28	·711	·691	·682	·676	·689	·689	·711	·723	·735	·733	·738	·723	·713	·684
29	·695	·673	·664	·655	·660	·663	·689	·696	·718	·717	·729	·714	·707	·687
30	·701	·681	·665	·652	·655	·657	·679	·689	·703	·705	·706	·701	·684	·663
31	·685	·665	·661	·651	·661	·665	·691	·703	·726	·729	·736	·718	·705	·690
Mean .	29·633	29·613	29·607	29·599	29·610	29·613	29·636	29·647	29·667	29·667	29·671	29·657	29·646	29·624
Variation.	+·002	—·018	—·024	—·032	—·021	—·018	+·005	+·016	+·036	+·036	+·040	+·026	+·015	—·007
Mean in milibars.	1003·50	1002 80	1002·64	1002·30	1002·70	1002·80	1003·60	1003·94	1004·67	1004·67	1004·73	1004·34	1003·90	1003·23
Variation in milibars.	+·08	—·62	—·78	—1·12	—·72	—·62	+·18	+·52	+1·25	+1·25	+1·31	+·92	+·48	—·19

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JULY. (IN INCHES OF MERCURY AT 32° F.)

Hours.										Mean.		Maximum.		Minimum.		Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	Inches.	Milibars	Time.	Mag.	Time.	Mag.	
												H. M.		H. M.		
29·588	29·568	29·572	29·562	29·575	29·574	29·573	29·568	29·573	29·553	29·618	1002·97	1 15	29·691	23 58	29·543	1
·481	·460	·472	·458	·456	·468	·504	·516	·524	·506	**·479**	**998·30**	0 2	·540	3 50	**·444**	2
·516	·494	·498	·498	·518	·516	·538	·544	·554	·542	·515	998·47	9 10	·558	3 28	·454	3
·544	·529	·536	·535	·552	·552	·568	·578	·590	·570	·545	1000·57	22 38	·596	3 40	·486	4
·589	·575	·596	·598	·619	·627	·643	·659	·681	·668	·593	02·10	22 5	·685	4 45	·529	5
·714	·688	·676	·686	·712	·721	·746	·744	·742	·730	·707	06·04	10 50	·764	2 28	·640	6
·664	·638	·689	·635	·652	·654	·671	·670	·678	·660	·685	05·27	8 15	·742	16 55	·630	7
·625	·601	·603	·601	·625	·634	·651	·648	·651	·638	·637	03·64	9 30	·678	16 10	·595	8
·630	·619	·627	·630	·656	·662	·684	·684	·692	·675	·644	03·83	21 57	·694	3 0	·590	9
·677	·658	·658	·661	·673	·683	·699	·696	·708	·689	·676	04·90	10 25	·714	4 5	·636	10
·664	·642	·646	·642	·652	·662	·677	·690	·693	·677	·672	04·77	9 20	·723	2 53	·633	11
·630	·619	·627	·627	·637	·647	·663	·661	·663	·647	·650	04·10	10 20	·699	15 50	·609	12
·634	·604	·598	·597	·622	·631	·650	·656	·674	·662	·637	03·64	9 58	·684	16 40	·586	13
·648	·618	·617	·617	·646	·641	·661	·666	·667	·661	·648	03·97	10 13	·689	3 10	·605	14
·651	·630	·632	·640	·662	·677	·698	·706	·715	·696	·665	04·57	21 57	·720	2 40	·614	15
·655	·644	·645	·637	·649	·653	·669	·675	·678	·669	·670	04·70	8 52	·707	16 12	·631	16
·626	·613	·619	·622	·644	·653	·670	·669	·675	·670	·643	03·80	23 45	·681	4 30	·605	17
·702	·693	·700	·702	·726	·734	·746	·746	·749	·739	·704	05·93	21 34	·753	2 35	·643	18
·727	·708	·701	·702	·716	·717	·733	·725	·729	·716	**·730**	**06·80**	8 50	·772	16 26	·688	19
·633	·618	·619	·622	·643	·653	·671	·671	·674	·656	·660	04·40	0 2	·714	16 10	·610	20
·673	·654	·653	·651	·670	·677	·684	·684	·690	·674	·666	04·60	10 17	·714	3 5	·602	21
·704	·688	·686	·689	·704	·708	·729	·738	·743	·725	·703	05·90	10 11	·749	3 20	·637	22
·707	·687	·687	·687	·703	·702	·723	·711	·709	·703	·708	06·07	9 30	·755	2 53	·661	23
·645	·626	·625	·628	·651	·653	·678	·685	·692	·675	·661	04·43	22 30	·695	16 8	·619	24
·637	·614	·625	·628	·653	·658	·663	·667	·689	·668	·654	04·23	22 14	·695	15 50	·607	25
·585	·567	·577	·593	·619	·643	·665	·667	·681	·672	·642	03 77	8 30	·695	15 58	·561	26
·638	·615	·617	·630	·654	·670	·690	·715	·726	·706	·659	04·40	22 45	·732	16 7	·608	27
·664	·635	·629	·632	·643	·648	·681	·690	·703	·695	·680	05·10	9 55	·735	16 45	·621	28
·655	·623	·615	·615	·639	·641	·657	·655	·667	·658	·658	04·37	8 38	·705	16 45	·605	29
·609	·591	·595	·599	·623	·637	·655	·648	·665	·652	·629	03·40	22 25	·673	15 48	·585	30
·658	·640	·643	·642	·661	·671	·692	·694	·705	·685	·660	04·40	22 18	·707	3 10	·605	31
29·638	29·618	29·620	29·621	29·640	29·647	29·666	29·669	29·677	29·662	29·648	1004·01					Mean.
—·010	—·030	—·028	—·027	—·008	—·001	+·018	+·021	+·029	+·014							Variation.
1003·67	1002·97	1003·10	1003·13	1003·70	1003·94	1004·60	1004·70	1004·94	1004·47							Mean in millbars.
—·34	—·104	—·91	—·88	—·31	—·07	+·59	+·69	+·93	+·46							Variation in millbars.

AUGUST.

29·661	29·646	29·646	29·646	29·668	29·680	29·701	29·713	29·714	29·690	29·676	1004·90	9 25	29·724	4 16	29·620	1
·666	·642	·634	·634	·652	·671	·698	·698	·696	·673	·684	05·23	9 50	·740	16 30	·632	2
·653	·638	·626	·628	·646	·652	·671	·674	·680	·668	·661	04·43	8 12	·704	16 50	·622	3
·637	·619	·624	·622	·629	·637	·650	·659	·671	·659	·658	04·37	9 20	·695	16 40	·617	4
·587	·566	·559	·561	·574	·583	·605	·607	·613	·591	·613	02·80	10 30	·671	16 22	·555	5
·554	·533	·537	·544	·561	·569	·589	·593	·605	·595	·573	01·50	10 27	·631	3 55	·531	6
·538	·508	·517	·525	·538	·554	·576	·578	·584	·565	·559	01 00	9 10	·604	15 30	·502	7
·498	**·472**	·478	·479	·501	·517	·539	·553	·561	·538	**·524**	**999·83**	10 5	·558	16 12	**·468**	8
·534	·524	·522	·530	·552	·575	·602	·616	·621	·603	·554	1000·83	21 38	·623	3 30	·485	9
·635	·624	·635	·643	·669	·680	·697	·706	·715	·699	·648	03·97	22 10	·719	2 10	·573	10
·644	·623	·630	·627	·646	·656	·678	·675	·681	·664	·669	04·70	9 25	·715	16 56	·621	11
·621	·601	·601	·601	·617	·625	·642	·648	·653	·641	·639	03·70	9 55	·685	17 2	·595	12
·585	·573	·572	·577	·595	·603	·627	·630	·641	·624	·620	03·10	10 5	·670	16 52	·570	13
·575	·558	·563	·564	·578	·584	·608	·615	·617	·597	·594	02·13	10 35	·632	16 33	·554	14
·539	·517	·512	·517	·543	·557	·575	·586	·591	·579	·566	01·20	9 30	·606	16 10	·508	15
·556	·536	·532	·536	·549	·553	·566	·566	·576	·557	·568	01·27	10 5	·629	16 27	·527	16
·536	·522	·528	·528	·539	·547	·571	·572	·577	·559	·553	00·80	10 5	·601	3 40	·513	17
·549	·535	·541	·554	·580	·587	·606	·617	·631	·623	·565	01·17	22 5	·636	3 18	·506	18
·609	·601	·605	·615	·631	·635	·650	·659	·663	·641	·631	03·43	10 28	·679	2 58	·585	19
·610	·606	·616	·624	·636	·636	·644	·648	·650	·628	·635	03·47	9 58	·682	14 36	·598	20
·622	·603	·606	·611	·629	·636	·656	·650	·650	·632	·630	03·40	9 35	·678	3 25	·582	21
·603	·595	·605	·609	·625	·629	·639	·631	·628	·608	·617	02 94	10 5	·662	4 10	·587	22
·595	·577	·577	·582	·595	·609	·621	·619	·627	·611	·608	02·67	8 50	·651	3 37	·569	23
·623	·610	·620	·626	·648	·654	·679	·690	·711	·699	·640	03·70	12 26	·714	3 50	·584	24
·694	·683	·689	·693	·717	·730	·762	·771	**·777**	·767	·717	**06·34**	21 12	**·777**	1 50	·657	25
·694	·679	·683	·680	·689	·692	·715	·714	·720	·703	**·719**	**06 40**	9 15	·763	15 55	·679	26
·668	·654	·653	·655	·680	·683	·708	·710	·727	·718	·690	05·40	21 52	·733	16 5	·651	27
·673	·654	·653	·655	·671	·677	·697	·708	·718	·706	·696	05 60	9 30	·741	15 55	·651	28
·675	·667	·665	·672	·689	·705	·720	·724	·723	·713	·693	05·50	10 45	·731	4 5	·661	29
·652	·637	·634	·635	·661	·669	·693	·706	·709	·695	·676	04·90	9 12	·709	16 20	·625	30
·673	·649	·652	·650	·665	·672	·693	·697	·713	·691	·685	05·27	10 5	·737	3 5	·643	31
29·612	**29·595**	29·597	29·601	29·618	29·628	29·648	29·653	29·659	29·643	29·631	1003·42					Mean.
—·019	**—·036**	—·034	—·030	—·013	—·003	+·017	+·022	+·028	+·012							Variation.
1002·77	**1002·17**	1002·24	1002·43	1002·97	1003·37	1003·97	1004·20	1004·40	1003·80							Mean in millbars.
—·65	**—1·25**	—1·18	—·99	—·45	—·05	+·55	+·78	+·98	+·38							Variation in millbars.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER. (IN INCHES OF MERCURY AT 32° F.)

Date.	Hours.													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
1	29·683	29·663	29·655	29·652	29·664	29·670	29·697	29·705	29·729	29·739	29·740	29·719	29·710	29·693
2	·727	·710	·701	·692	·702	·708	·730	·746	·768	·779	·780	·764	·752	·727
3	·754	·727	·723	·719	·731	·733	·756	·768	·795	·795	·791	·779	·763	·740
4	·733	·709	·693	·683	·694	·697	·719	·731	·757	·754	·750	·730	·705	·686
5	·666	·648	·640	·630	·651	·657	·680	·690	·706	·704	·718	·704	·687	·659
6	·709	·692	·685	·687	·702	·713	·734	·750	·768	·772	·781	·765	·753	·745
7	·763	·740	·737	·729	·743	·751	·781	·792	·818	·818	·827	·811	·791	·768
8	·779	·762	·763	·768	·781	·793	·822	·839	·861	·866	·871	·862	·842	·824
9	·808	·792	·794	·783	·801	·807	·827	·843	·872	·872	·870	·847	·834	·806
10	·843	·829	·836	·831	·838	·842	·868	·876	**·892**	·886	·884	·862	·840	·812
11	·817	·793	·799	·791	·798	·797	·825	·843	·865	·863	·869	·857	·841	·812
12	·818	·799	·795	·786	·805	·805	·822	·840	·856	·855	·853	·833	·817	·790
13	·782	·776	·775	·761	·769	·768	·788	·793	·818	·818	·822	·809	·804	·781
14	·804	·800	·792	·788	·789	·798	·818	·829	·850	·852	·844	·828	·802	·779
15	·807	·793	·787	·781	·800	·806	·825	·835	·857	·849	·857	·841	·833	·803
16	·810	·793	·787	·781	·791	·789	·805	·817	·837	·839	·835	·814	·795	·761
17	·787	·774	·775	·772	·790	·797	·822	·839	·856	·852	·844	·826	·801	·767
18	·791	·783	·776	·772	·796	·781	·797	·794	·804	·803	·804	·789	·759	·722
19	·687	·673	·661	·646	·652	·657	·679	·694	·710	·699	·697	·688	·676	·640
20	·678	·662	·652	·619	·622	·652	·691	·699	·712	·689	·692	·668	·662	·628
21	·671	·650	·645	·640	·658	·665	·692	·706	·740	·740	·740	·710	·691	·662
22	·711	·691	·677	·670	·687	·692	·723	·737	·762	·763	·764	·745	·726	·697
23	·745	·725	·727	·725	·737	·737	·761	·769	·793	·799	·799	·775	·761	·732
24	·783	·758	·753	·743	·760	·768	·789	·803	·829	·825	·831	·803	·784	·756
25	·792	·778	·772	·764	·782	·784	·811	·823	·844	·840	·838	·811	·787	·758
26	·742	·722	·714	·704	·719	·718	·738	·749	·774	·768	·768	·739	·718	·689
27	·712	·694	·690	·676	·700	·702	·728	·741	·758	·752	·758	·738	·730	·700
28	·758	·749	·740	·740	·760	·762	·788	·800	·822	·822	·830	·802	·779	·761
29	·835	·821	·817	·803	·819	·824	·845	·857	·873	·873	·871	·847	·833	·811
30	·815	·801	·789	·777	·790	·794	·817	·832	·851	·849	·847	·835	·807	·787
Mean .	29·760	29·744	29·738	29·730	29·744	29·749	29·773	29·785	**29·806**	29·805	29·806	29·787	29·769	29·743
Variation.	·000	—·016	—·022	—·030	—·016	—·011	+·013	+·025	**+·046**	+·045	+·046	+·027	+·009	—·017
Mean in milibars.	1007·80	1007·23	1007·07	1006·80	1007·23	1007·40	1008·20	1008·67	**1009·30**	1009·27	1009·30	1008·74	1008·10	1007·20
Variation in milibars.	+·01	—·56	—·72	—·99	—·56	—·39	+·41	+·88	**+1·51**	+1·48	+1·51	+·95	+·31	—·59

OCTOBER.

1	29·810	29·795	29·787	29·778	29·793	29·792	29·815	29·832	29·855	29·863	29·870	29·844	29·824	29·802
2	·853	·826	·825	·807	·809	·817	·839	·850	·878	·873	·869	·845	·827	·801
3	·803	·784	·775	·762	·770	·771	·789	·799	·826	·828	·818	·792	·778	·752
4	·757	·722	·711	·714	·726	·730	·748	·758	·777	·779	·781	·751	·716	·692
5	·712	·690	·684	·670	·681	·687	·709	·721	·735	·730	·733	·707	·678	·647
6	·656	·637	·632	·623	·635	·640	·667	·675	·695	·695	·703	·680	·641	·624
7	·660	·641	·636	·626	·633	·638	·671	·682	·703	·706	·709	·691	·663	·636
8	·651	·629	·616	·606	·629	·642	·665	·678	·700	·705	·708	·688	·673	·653
9	·700	·685	·673	·666	·685	·687	·717	·731	·753	·767	·774	·748	·725	·703
10	·760	·748	·741	·730	·730	·733	·763	·772	·810	·818	·809	·787	·769	·748
11	·786	·766	·746	·740	·774	·778	·798	·814	·846	·845	·849	·821	·802	·781
12	·784	·759	·754	·743	·746	·747	·774	·785	·807	·811	·813	·788	·764	·749
13	·746	·716	·712	·707	·728	·731	·759	·769	·793	·791	·780	·764	·734	·712
14	·760	·748	·745	·741	·750	·764	·784	·786	·815	·812	·812	·780	·770	·745
15	·774	·752	·754	·746	·753	·750	·778	·794	·816	·821	·819	·790	·773	·744
16	·771	·754	·753	·747	·758	·768	·797	·814	·843	·848	·851	·821	·802	·785
17	·826	·808	·801	·792	·803	·812	·844	·857	·884	·880	·878	·848	·821	·807
18	·841	·819	·820	·812	·830	·843	·871	·878	·903	·899	·891	·863	·836	·817
19	·844	·826	·828	·819	·832	·842	·878	·890	·917	·916	·908	·885	·866	·842
20	·867	·854	·848	·847	·866	·880	·912	·921	·935	·934	·923	·899	·869	·838
21	·851	·832	·825	·826	·837	·843	·867	·869	·888	·886	·877	·855	·836	·812
22	·840	·823	·819	·817	·829	·840	·874	·883	·911	·910	·904	·880	·855	·836
23	·888	·873	·877	·863	·879	·888	·908	·916	·948	·945	·938	·909	·891	·866
24	·895	·877	·872	·864	·873	·880	·899	·904	·928	·927	·919	·893	·865	·847
25	·881	·865	·859	·845	·851	·858	·853	·893	·912	·916	·917	·887	·865	·833
26	·865	·847	·841	·835	·845	·854	·887	·900	·931	·932	·924	·891	·859	·834
27	·894	·880	·882	·880	·894	·910	·941	·953	·970	·970	·954	·927	·897	·866
28	·909	·896	·894	·899	·910	·920	·951	·961	·982	·982	·980	·955	·932	·917
29	·932	·914	·917	·915	·923	·932	·964	·966	**·984**	·981	·975	·944	·921	·890
30	·887	·865	·855	·846	·851	·851	·875	·880	·906	·906	·894	·869	·834	·811
31	·817	·804	·796	·785	·801	·814	·852	·867	·886	·884	·876	·846	·824	·796
Mean .	29·807	29·788	29·783	29·776	29·788	29·795	29·821	29·832	29·856	**29·857**	29·853	29·827	29·804	29·780
Variation.	+·002	—·017	—·022	—·029	—·017	—·010	+·016	+·027	+·051	**+·052**	+·048	+·022	—·001	—·025
Mean in milibars.	1009·34	1008·77	1008·60	1008·30	1008·77	1008·97	1009·83	1010·27	1011·00	**1011·04**	1010·90	1010·04	1009·23	1008·50
Variation in milibars.	+·02	—·55	—·72	—1·02	—·55	—·35	+·51	+·95	+1·68	**+1·72**	+1·58	+·72	—·09	—·82

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER. (IN INCHES OF MERCURY AT 32° F.)

Hours.										Mean.		Maximum.		Minimum.		Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	Inches.	Millibars.	Time.	Mag.	Time.	Mag.	
												H. M.		H. M.		
29·689	29·681	29·693	29·693	29·713	29·725	29·740	29·742	29·754	29·738	29·704	1005·93	22 12	29·757	3 4	29·643	1
·713	·700	·702	·706	·729	·738	·766	·771	·779	·763	·736	07·00	21 40	·784	3 30	·688	2
·731	·714	·712	·710	·731	·739	·764	·767	·760	·741	·748	07·37	8 45	·798	16 0	·706	3
·676	·659	·657	·660	·675	·676	·692	·692	·687	·672	·699	05·70	8 48	·763	16 55	·651	4
·653	·643	·655	·660	·685	·694	·722	·725	·729	·716	·680	05·10	21 36	·735	3 30	·629	5
·729	·720	·728	·730	·753	·765	·793	·789	·795	·772	·743	07·20	20 25	·799	2 42	·681	6
·760	·746	·748	·756	·780	·784	·797	·798	·797	·789	·776	08·30	10 0	·831	3 25	·725	7
·811	·792	·794	·796	·813	·821	·839	·836	·834	·815	·816	09·70	10 32	·876	1 50	·758	8
·793	·776	·781	·783	·804	·808	·830	·841	·848	·837	·819	09·80	9 10	·876	16 10	·770	9
·801	·783	·780	·782	·805	·808	·837	·846	·848	·824	**·836**	**10·40**	8 32	**·898**	17 30	·770	10
·797	·783	·790	·801	·825	·825	·833	·827	·839	·827	·822	09·87	9 45	·891	16 10	·777	11
·765	·743	·747	·743	·775	·779	·793	·797	·815	·791	·801	09·13	9 20	·865	17 40	·742	12
·768	·752	·758	·758	·775	·784	·803	·802	·810	·807	·787	08·74	9 5	·822	15 55	·750	13
·767	·750	·754	·758	·792	·804	·824	·818	·826	·812	·803	09·20	9 10	·854	16 45	·744	14
·793	·777	·779	·782	·802	·813	·831	·823	·823	·809	·813	09·60	9 5	·859	16 35	·773	15
·741	·725	·726	·734	·766	·775	·800	·805	·816	·802	·789	08·80	9 10	·848	15 50	·719	16
·736	·717	·716	·726	·756	·772	·801	·799	·812	·795	·789	08·80	8 0	·859	16 20	·707	17
·702	·680	·684	·686	·705	·707	·720	·714	·720	·694	·749	07·40	8 25	·808	15 30	·674	18
·623	·616	·635	·645	·666	·678	·695	·687	·692	·676	·670	04·70	8 40	·715	16 12	·609	19
·611	**·593**	·608	·611	·643	·658	·682	·682	·686	·673	**·657**	**04·34**	8 4	·716	15 35	**·588**	20
·654	·650	·649	·660	·677	·690	·726	·727	·730	·719	·687	05·34	9 10	·750	16 15	·638	21
·682	·664	·672	·684	·709	·730	·760	·770	·778	·756	·719	06·40	22 20	·782	15 55	·658	22
·719	·705	·721	·727	·758	·771	·793	·797	·801	·789	·757	07·74	9 25	·803	15 35	·699	23
·740	·723	·731	·741	·769	·781	·807	·809	·813	·799	·779	08·40	10 10	·837	15 15	·717	24
·740	·722	·728	·730	·748	·752	·764	·758	·770	·754	·777	08·34	9 2	·846	16 40	·710	25
·674	·660	·666	·670	·694	·706	·736	·728	·730	·722	·719	06·40	8 45	·778	15 57	·654	26
·684	·679	·684	·696	·718	·738	·756	·758	·770	·756	·722	06·47	10 12	·772	15 5	·664	27
·750	·740	·752	·758	·784	·797	·818	·824	·832	·827	·783	08·60	10 12	·842	15 45	·738	28
·789	·783	·793	·793	·814	·817	·829	·825	·835	·822	·826	10·00	9 55	·879	15 40	·781	29
·775	·767	·781	·786	·802	·802	·823	·823	·834	·817	·808	09·37	9 37	·855	15 5	·765	30
29·729	**29·715**	29·721	29·725	29·749	29·758	29·779	29·779	29·785	29·770	29·760	1007·79					Mean.
—·031	**—·045**	—·039	—·035	—·011	—·002	+·019	+·019	+·025	+·010							Variation.
1006·70	**1006·27**	1006·43	1006·57	1007·40	1007·77	1008·40	1008·40	1008·67	1008·10							Mean in millibars
—1·09	**— 1·52**	—1·36	—1·22	—·39	—·02	+·61	+·61	+·88	+·31							Variation in millibars

OCTOBER.

29·799	29·787	29·799	29·802	29·822	29·831	29·856	29·858	29·866	29·854	29·822	1009·87	10 5	29·873	3 45	29·773	1
·774	·751	·755	·763	·786	·797	·827	·824	·837	·819	·819	09·80	8 47	·882	16 22	·746	2
·735	·713	·717	·729	·758	·768	·791	·790	·790	·769	·775	08·27	9 58	·832	16 15	·708	3
·673	·651	·677	·695	·713	·731	·757	·762	·754	·734	·730	06·80	9 56	·784	15 15	·646	4
·621	·606	·627	·640	·667	·679	·709	·705	·700	·670	·684	05·23	8 58	·740	14 55	·602	5
·606	**·591**	·609	·615	·637	·644	·669	·671	·699	·670	**·651**	**04·13**	10 32	·708	15 5	**·582**	6
·621	·613	·624	·631	·654	·664	·684	·682	·684	·664	·659	04·40	9 56	·713	14 50	·607	7
·635	·622	·639	·649	·677	·689	·716	·715	·717	·703	·667	04·64	20 58	·722	2 30	·602	8
·694	·686	·696	·701	·733	·743	·761	·761	·769	·766	·722	06·47	10 9	·782	2 32	·662	9
·729	·720	·734	·743	·772	·790	·815	·817	·816	·794	·769	08·10	9 12	·825	15 36	·715	10
·758	·744	·753	·760	·772	·769	·808	·810	·812	·794	·789	08·80	10 10	·853	3 22	·735	11
·745	·718	·725	·725	·738	·751	·777	·777	·776	·766	·763	07·90	9 25	·817	15 48	·713	12
·687	·685	·706	·715	·743	·761	·779	·780	·786	·773	·744	07·23	8 30	·796	14 22	·682	13
·732	·724	·734	·738	·767	·773	·800	·794	·798	·784	·769	08·10	9 15	·822	15 20	·714	14
·733	·725	·741	·742	·767	·781	·798	·789	·792	·780	·771	08·13	9 55	·826	14 40	·720	15
·772	·771	·787	·795	·823	·837	·851	·842	·845	·834	·803	09 20	20 45	·856	3 37	·742	16
·801	·791	·811	·817	·847	·867	·883	·873	·868	·848	·837	10·44	9 30	·890	14 55	·786	17
·805	·796	·809	·807	·832	·846	·870	·866	·868	·855	·845	10·67	9 20	·907	15 30	·793	18
·834	·825	·839	·841	·865	·879	·895	·894	·890	·880	·864	11·33	9 0	·921	3 54	·815	19
·815	·809	·820	·821	·843	·857	·880	·878	·874	·859	·869	11·50	8 50	·940	15 36	·806	20
·796	·781	·793	·801	·836	·846	·866	·863	·861	·845	·841	10·53	9 0	·892	15 8	·778	21
·819	·806	·812	·816	·844	·863	·896	·896	·900	·884	·857	11·04	9 12	·914	15 52	·798	22
·861	·848	·857	·855	·873	·884	·903	·905	·915	·897	·891	12 23	9 25	·950	15 42	·842	23
·834	·819	·829	·827	·853	·860	·885	·887	·897	·893	·876	11 70	8 50	·933	15 50	·815	24
·819	·802	·811	·817	·846	·856	·875	·875	·878	·866	·862	11·27	9 25	·925	16 0	·801	25
·810	·801	·812	·819	·847	·864	·887	·897	·904	·900	·866	11 40	9 5	·937	15 50	·789	26
·859	·839	·855	·858	·881	·899	·922	·922	·926	·922	·904	12·63	9 5	·977	14 45	·837	27
·900	·885	·892	·895	·920	·932	·954	·949	·950	·939	**·929**	**13·50**	9 35	·986	16 0	·882	28
·869	·857	·861	·863	·880	·887	·914	·910	·911	·898	·917	13·14	8 30	**·988**	16 5	·852	29
·791	·774	·786	·790	·808	817	·838	·842	·843	·824	·843	10 60	9 10	·910	16 10	·768	30
·784	·769	·784	·786	·820	·837	·860	·860	·864	·856	·828	10·07	9 15	·890	15 35	·768	31
29·765	**29·752**	29·764	29·770	29·794	29·807	29·830	29·829	29·832	29·817	29·805	1009·32					Mean.
—·040	**—·053**	—·041	—·035	—·011	—·002	+·025	+·024	+·027	+·012							Variation.
1007·97	**1007·57**	1007·93	1008·10	1008·93	1009·34	1010·20	1010·10	1010·27	1009·74							Mean in millibars
—·135	**—1·75**	—1·39	—1·22	—·39	+·02	+·88	+·78	+·95	+·42							Variation in Millibars.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER. (IN INCHES OF MERCURY AT 32° F.

Date.	Hours.													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
1	29·845	29·831	29·826	29·823	29·838	29·849	29·871	29·881	29·895	29·893	29·887	29·854	29·823	29·791
2	·782	·763	·755	·758	·757	·758	·785	·804	·849	·859	·851	·839	·828	·817
3	·891	·878	·880	·875	·883	·897	·919	·928	·942	·934	·922	·895	·879	·862
4	·918	·898	·883	·867	·869	·878	·904	·914	·938	·933	·918	·890	·869	·846
5	·869	·857	·858	·850	·861	·869	·908	·918	·946	·944	9.8	·894	·864	·838
6	·856	·833	·834	·821	·832	·836	·863	·875	·898	·898	·895	·869	·846	·818
7	·849	·837	·842	·837	·843	·857	·888	·899	·926	·925	·919	·887	·863	·840
8	·894	·877	·876	·867	·884	·887	·914	·919	·943	·939	·929	·903	·892	·863
9	·918	·899	·896	·884	·898	·910	·934	·941	·971	·973	·965	·931	·897	·880
10	·907	·888	·883	·872	·877	·891	·919	·931	·960	·957	·944	·921	·897	·855
11	·878	·854	·851	·840	·840	·842	·860	·872	·897	·894	·884	·854	·828	·809
12	·884	·864	·857	·849	·862	·872	·890	·900	·918	·916	·916	·895	·872	·840
13	·867	·854	·851	·838	·858	·874	·915	·930	·953	·954	·948	·930	·907	·884
14	·887	·869	·859	·850	·865	·875	·912	·927	·949	·949	·949	·922	·897	·873
15	·914	·894	·888	·878	·890	·890	·918	·918	·940	·940	·933	·910	·884	·864
16	·922	·902	·898	·884	·893	·905	·932	·938	·964	·960	·960	·936	·916	·884
17	·943	·927	·926	·917	·927	·933	·966	·979	30·001	·999	·986	·955	·921	·886
18	·895	·878	·877	·872	·885	·897	·938	·947	29·974	·972	·968	·937	·909	·879
19	·933	·916	·918	·904	·917	·937	·964	·981	30·005	30·006	30·003	·977	·944	·918
20	·956	·938	·936	·923	·943	·949	·973	·989	·014	·012	·006	·979	.960	·923
21	·938	·919	·920	·907	·917	·925	·949	·964	29·999	29 999	29·996	·965	·933	·908
22	·908	·890	·886	·875	·888	·897	·923	·934	·961	·961	·949	·916	·887	·851
23	·883	·869	·870	·859	·870	·876	·910	·920	·947	·946	·944	·914	·888	·861
24	·900	·888	·888	·876	·878	·885	·909	·925	·950	·950	·942	·914	·882	·849
25	·898	·886	·888	·884	·893	·898	·927	·945	·975	·971	·970	·945	·912	·886
26	·904	·887	·879	·870	·879	·889	·915	·931	·962	·960	·955	·932	·907	·879
27	·923	·908	·903	·894	·909	·909	·939	·953	·978	·979	·971	·940	·905	·882
28	·926	·914	·913	·902	·915	·923	·954	·978	30·006	30·005	30·002	·976	·954	·924
29	·933	·923	·921	·922	·937	·951	·982	30·003	·035	·036	·027	·999	·947	·924
30	·932	·915	·907	·892	·910	·915	·941	29·956	29·982	29·977	29·964	·935	·916	·883
Mean .	29·898	29·882	29·879	29·870	29·881	29·889	29·917	29·930	**29·956**	29·955	29·948	29·920	29·894	29·868
Variation.	+·001	—·015	—·018	—·027	—·016	—·008	+·020	+·033	**+·059**	+·058	+·051	+·023	—·003	—·029
Mean in millibars.	1012·47	1011·97	1011·80	1011·50	1011·93	1012·20	1013·14	1013·50	**1014·40**	1014·37	1014·17	1013·20	1012·33	1011·47
Variation in millibars.	+·05	—·45	—·62	—·92	—·49	—·22	+·72	+1·08	**+1·98**	+1·95	+1·75	+·78	—·09	—·95

DECEMBER.

1	29·924	29·914	29·911	29·996	29·922	29·920	29·947	29·964	29·985	29·986	29·979	29·952	29·924	29·900
2	·910	·900	·894	·882	·888	·899	·924	·936	·966	·965	·957	·934	·911	·878
3	·904	·888	·886	·879	·884	·888	·912	·923	·951	·948	·940	·912	·873	·856
4	·872	·860	·855	·853	·863	·871	·897	·915	·946	·947	·930	·904	·876	·843
5	·868	·856	·856	·853	·872	·883	·918	·938	·962	·962	·956	·930	·901	·872
6	·911	·895	·889	·893	·917	·923	·960	·981	30·008	30·007	30·003	·984	·953	·928
7	·966	·952	·947	·946	·956	·965	·989	30·001	·028	·026	·018	·992	·957	·926
8	·901	·889	·887	·882	·887	·891	·929	29·945	29·977	29·979	29·969	·944	·924	·885
9	·896	·880	·878	·869	·885	·896	·924	·938	·970	·972	·963	·933	·890	·868
10	·883	·874	·859	·833	·855	·887	·922	·939	·969	·971	·965	·932	·901	·865
11	·901	·880	·873	·867	·872	·876	·898	·910	·931	·930	·924	·894	·869	·841
12	·862	·848	·844	·840	·847	·845	·870	·888	·915	·914	·909	·890	·891	·894
13	·850	·830	·835	·819	·822	·830	·855	·868	·903	·913	·911	·885	·859	·848
14	·871	·849	·839	·830	·839	·838	·862	·879	·896	·898	·899	·875	·859	·836
15	·862	·847	·861	·838	·846	·861	·883	·905	·922	·920	·917	·891	·877	·855
16	·912	·893	·892	·884	·900	·915	·938	·954	·983	·983	·985	·964	·940	·920
17	·947	·925	·921	·908	·918	·928	·952	·966	·993	·993	·989	·965	·940	·912
18	·943	·928	·921	·909	·917	·918	·945	·957	·985	·989	·979	·953	·925	·895
19	·932	·920	·917	·906	·919	·923	·953	·967	30·006	30·004	·994	·970	·941	·925
20	·935	·920	·914	·904	·920	·925	·953	·971	·001	·003	·996	·969	·941	·913
21	·943	·932	·923	·913	·918	·918	·935	·952	29·974	29·974	·973	·949	·923	·903
22	·946	·930	·916	·906	·910	·919	·946	·964	·927	·995	·991	·963	·939	·903
23	·935	·923	·912	·903	·914	·920	·948	·957	·991	·996	·988	·963	·937	·915
24	·920	·905	·898	·887	·903	·908	·936	·950	·985	·995	·995	·972	·944	·916
25	·957	·941	·937	·928	·935	·938	·961	·976	30·008	30·008	·999	·976	·930	·897
26	·908	·898	·899	·896	·911	·909	·935	·953	29·990	29·998	·996	·973	·947	·913
27	·967	·954	·948	·932	·940	·945	·973	·986	30·026	30·026	30·024	·995	·970	·948
28	·967	·961	·957	·947	·950	·950	·969	·987	·023	·027	·021	·990	·957	·929
29	·977	·971	·965	·958	·965	·968	·993	30·006	·038	**·041**	·029	30·001	·968	·939
30	·974	·959	·957	·949	·959	·964	·980	29·995	·023	·026	·015	29·989	·957	·926
31	·949	·937	·932	·932	·940	·942	·964	·976	30·004	·012	30·011	·982	·942	·924
Mean .	29·919	29·905	29·901	29·892	29·902	29·908	29·935	29·950	29·979	**29·981**	29·975	29·949	29·921	29·896
Variation.	—·001	—·015	—·019	—·028	—·018	—·012	+·015	+·030	+·059	**+·061**	+·055	+·029	+·001	—·024
Mean in millibars.	1013·20	1012·67	1012·53	1012·27	1012·57	1012·77	1013·67	1014·20	1015·20	**1015·23**	1015·07	1014·20	1013·23	1012·40
Variation in millibars.	+·01	—·52	—·66	—·92	—·62	—·42	+·48	+1·01	+2·01	**+2·04**	+1·88	+1·01	+·04	—·79

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER. (IN INCHES OF MERCURY AT 32° F.)

Hours.										Mean.		Maximum.		Minimum.		Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	Inches.	Millibars.	Time.	Mag.	Time.	Mag.	
												H. M.		H. M.		
29·771	29·756	29·768	29·773	29·794	29·807	29·825	29·827	29·825	29·805	29·827	1010·04	9 30	29·903	15 20	29·753	1
·812	·811	·823	·831	·859	·883	·904	·897	·903	·902	**·826**	**10·00**	20 27	·905	2 35	·751	2
·851	·850	·860	·862	·891	·904	·928	·923	·931	·921	·896	12·40	9 0	·944	14 30	·842	3
·829	·821	·840	·849	·863	·872	·892	·890	·890	·877	·881	11·93	8 45	·940	15 5	·820	4
·816	·802	·812	·814	·844	·861	·884	·880	·884	·864	·869	11·50	9 17	·948	15 58	·794	5
·806	·790	·800	·808	·836	·848	·867	·863	·865	·856	·846	10·70	9 10	·904	16 3	·784	6
·826	·818	·834	·835	·863	·883	·902	·896	·903	·891	·869	11·50	9 20	·931	15 40	·815	7
·858	·853	·867	·869	·894	·905	·922	·916	·928	·920	·897	12·44	8 55	·948	15 40	·846	8
·867	·858	·867	·870	·896	·906	·926	·923	·927	·906	·910	12·90	9 15	·980	15 56	·852	9
·853	·843	·856	·859	·879	·889	·894	·896	·911	·893	·895	12·37	9 5	·961	15 50	·839	10
·802	·795	·817	·820	·845	·861	·886	·888	·897	·885	·854	10·93	9 4	·902	15 15	·778	11
·821	·809	·831	·842	·866	·876	·892	·887	·888	·868	·871	11·53	8 55	·922	15 30	·798	12
·848	·834	·837	·841	·871	·882	·902	·902	·903	·891	·886	12·10	9 10	·962	15 50	·824	13
·863	·853	·875	·882	·913	·917	·925	·927	·935	·924	·900	12·50	9 32	·955	15 24	·841	14
·850	·833	·845	·850	·883	·898	·925	·928	·934	·921	·897	12·44	9 10	·954	16 10	·830	15
·876	·866	·880	·888	·914	·926	·942	·939	·955	·946	·918	13·17	8 40	·970	15 40	·862	16
·865	·849	·860	·861	·885	·895	·913	·912	·913	·896	·921	13·23	8 32	30·005	15 22	·843	17
·865	·856	·872	·876	·907	·928	·945	·943	·949	·935	·913	13·00	8 50	29·979	15 32	·849	18
·899	·884	·891	·893	·928	·941	·969	·967	·970	·956	·943	14·00	8 45	30·009	15 48	·875	19
·911	·897	·910	·901	·930	·939	**·961**	·958	·961	·941	**·950**	**14·20**	9 5	·023	16 22	·885	20
·881	·863	·865	·874	·897	·904	·927	·928	·929	·911	·926	13·40	9 7	·011	16 15	·855	21
·833	·821	·833	·843	·872	·882	·897	·894	·895	·883	·891	12·23	8 44	29·969	16 16	·817	22
·842	·828	·838	·846	·870	·888	·904	·904	·912	·904	·887	12·14	8 40	·948	15 34	·822	23
·838	·832	·835	·842	·868	·883	·901	·902	·906	·893	·889	12·20	9 5	·958	15 56	·824	24
·870	·858	·864	·868	·887	·897	·916	·922	·922	·906	·908	12·77	8 45	·976	16 10	·852	25
·868	·855	·871	·881	·907	·918	·938	·945	·946	·930	·909	12·80	8 56	·970	16 5	·850	26
·865	·855	·868	·873	·895	·910	·935	·935	·936	·924	·916	13·10	9 8	·986	16 8	·848	27
·906	·889	·896	·901	·930	·939	·954	·952	·948	·935	·939	13·80	8 48	30·012	16 5	·882	28
·905	·890	·896	·899	·926	·935	·955	·955	·950	·938	·949	14·20	9 7	**·044**	15 55	·874	29
·871	·855	·872	·878	·900	·912	·932	·933	·938	·927	·918	13·17	8 42	29·986	15 52	·852	30
29·852	**29·841**	29·852	29·858	29·884	29·896	29·915	29·914	29·918	29·905	29·897	1012·42					Mean.
—·045	**—·056**	—·045	—·039	—·013	—·001	+·018	+·017	+·021	+·008							Variation.
1010·87	**1010·53**	1010·87	1011·07	1012·03	1012·40	1013·07	1013·03	1013·17	1012·67							Mean in millibars.
—1·55	**—1·89**	—1·55	—1·35	—·39	—·02	+·65	+·61	+·75	+·25							Variation in millibars.

DECEMBER.

29·878	29·866	29·882	29·890	29·910	29·922	29·938	29·932	29·928	29·911	29·925	1013·37	9 15	29·986	16 5	29·864	1
·862	·850	·863	·866	·891	·904	·920	·920	·926	·910	·907	12·74	9 10	·970	15 46	·848	2
·846	·834	·846	·850	·876	·882	·902	·902	·902	·882	·890	12·20	9 0	·952	16 13	·832	3
·828	·820	·828	·836	·860	·873	·886	·884	·884	·873	·875	11·67	8 42	·948	16 5	·816	4
·848	·837	·850	·856	·882	·892	·913	·913	·924	·913	·894	12·33	9 5	·964	16 15	·836	5
·907	·894	·910	·919	·949	·961	·985	·989	·988	·977	·947	14·14	8 43	30·011	2 45	·883	6
·898	·880	·881	·882	·897	·898	·913	·912	·914	·899	·913	14·00	8 30	·029	15 52	·874	7
·869	·855	·858	·859	·884	·894	·915	·920	·923	·906	·907	12·74	9 8	29·980	15 55	·853	8
·850	·833	·837	·841	·867	·878	·904	·907	·903	·888	·895	12·37	9 12	·978	17 5	·824	9
·854	·845	·853	·861	·890	·906	·926	·924	**·929**	·911	·898	12·47	9 12	·973	3 45	·821	10
·825	**·810**	·820	·821	·840	·855	·875	·876	·878	·865	·872	11·57	9 5	·932	16 10	**·806**	11
·889	·870	·876	·874	·888	·898	·930	·927	·907	·876	·883	12·00	20 56	·940	2 45	·836	12
·829	·819	·827	·830	·858	·874	·895	·894	·885	·873	·859	11·10	9 30	·920	3 17	·806	13
·825	·815	·829	·829	·855	·866	·876	·876	·878	·864	**·858**	**11·07**	9 25	·910	16 20	·814	14
·839	·823	·839	·846	·871	·889	·916	·923	·923	·913	·878	11·77	9 25	·935	15 20	·819	15
·916	·908	·923	·926	·950	·964	·975	·972	·967	·953	·938	13·77	9 10	·988	3 10	·880	16
·898	·886	·906	·916	·939	·948	·956	·954	·955	·947	·940	13·90	8 50	·996	15 30	·882	17
·884	·871	·878	·880	·911	·923	·945	·945	·946	·930	·928	13·47	9 0	·991	15 58	·867	18
·902	·891	·898	·902	·929	·936	·953	·955	·950	·938	·939	13·80	8 55	30·010	15 58	·888	19
·898	·887	·901	·908	·933	·946	·965	·972	·975	·957	·942	13·97	9 45	·006	15 22	·884	20
·879	·869	·881	·884	·915	·925	·956	·958	·960	·948	·929	13·50	8 50	29·978	15 58	·864	21
·884	·868	·877	·880	·908	·916	·942	·944	·952	·936	·936	13·53	8 48	·998	15 45	·864	22
·896	·880	·883	·883	·900	·914	·939	·941	·941	·921	·929	13·50	9 10	30·001	15 45	·877	23
·900	·887	·897	·900	·933	·945	·970	·970	·975	·962	·931	13·70	9 5	29·998	2 35	·884	24
·873	·860	·865	·867	·896	·907	·926	·926	·928	·912	·931	13·53	8 55	30·015	16 10	·855	25
·898	·887	·897	·902	·931	·948	·971	·971	·975	·960	·936	13·70	9 25	·002	15 35	·884	26
·924	·912	·914	·915	·945	·953	·977	·978	·979	·967	·962	14·67	9 5	·030	16 0	·908	27
·919	·914	·920	·923	·950	·959	·979	·980	·984	·975	·964	14·73	9 4	·031	15 50	·911	28
·919	·908	·915	·920	·948	·961	·979	·979	·989	·976	**·971**	**14·93**	9 2	**·044**	15 50	·904	29
·917	·908	·920	·922	·942	·950	·972	·972	·972	·956	·963	14·70	9 20	·031	14 35	·905	30
·904	·898	·907	·912	·941	·952	·974	·976	·972	·957	·952	14·27	9 35	·016	15 58	·896	31
29·879	**29·867**	29·877	29·881	29·906	29·917	29·938	29·938	29·939	29·924	29·920	1013·19					Mean.
—·041	**—·053**	—·043	—·039	—·014	—·003	+·018	+·018	+·019	+·004							Variation.
1011·80	**1011·44**	1011·74	1011·93	1012·70	1013·14	1013·77	1013·77	1013·80	1013·23							Mean in millibars.
—1·39	**—1·75**	—1·45	—1·26	—·49	—·05	+·58	+·58	+·61	+·04							Variation in millibars.

RAINFALL (IN INCHES), 1931.

(Totals for periods of sixty minutes from full hour to full hour of local mean time.)

JUNE. (FROM PLUVIOGRAPH RECORDS.)

Date.	Hours.													
	0–1	1–2	2–3	3–4	4–5	5–6	6–7	7–8	8–9	9–10	10–11	11–12	12–13	13–14
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	..	..	..	..	..	0·01	..	..	..	..	..	..	..	..
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	..	..	0·01	0·02	0·02	0·01	..	..	..	..	0·08	0·01	0·05	0·03
14	0·01	0·01	..	0·12	0·01	0·01	..	1·11	0·04	0·23	0·10	0·02	0·04	0·09
15	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	..	..	0·01	..	..	..	..	..	..	..	..	..	..	..
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	..	..	..	..	..	..	..	..	0·05	0·07	..	0·03	..	..
22	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	0·07	0·01	..	..	..	..	..	..
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..	..	..	..	0·03	..	..	..	..	..	..	..	..
28	..	..	0·24	0·34	..	..	..	..	..	0·02	0·54	0·70	0·24	0·09
29	..	..	..	..	..	..	..	0·04	0·21	0·14	..	..	..	..
30	0·09	0·07	..	0·02	0·13	0·01	..	..	0·06	0·15	..	0·18	0·13	0·40
Total .	0·10	0·08	0·26	0·50	0·16	0·07	0·07	1·16	0·36	0·61	0·72	0·94	0·46	0·61

JULY.

1	0·01	0·40	0·02	..	..	..	..	..	0·43	0·07	0·01	0·02	..	0·15
2	0·01	0·02	..	0·08	0·20	..	..	0·36	..	0·02	0·01	0·23	0·35	0·74
3	..	..	..	..	..	..	0·01	..	..	..	..	0·10	0·17	0·02
4	..	..	..	..	0·23	..	..	..	..	..	..	..	..	0·02
5	0·18	..	..	0·13	0·14	..	..	..	..	..	..	0·01	..	0·06
6	0·04	0·01	0·05	0·20	0·04	0·05	0·02	0·05	0·08	0·03	..	..	..	..
7	..	0·10	..	..	..	0·03	0·76	..	..	..	..	..	..	..
8	..	..	0·03	..	..	..	..	..	..	..	..	0·10	..	..
9	0·15	..	..	..	..	..	..	..	..	..	0·04	..	0·17	0·37
10	..	..	..	0·07	..	..	..	..	..	0·24	..	0·01	..	0·20
11	..	..	..	..	0·02	..	0·17	0·12	0·37	..	..	..	..	..
12	..	..	..	..	0·02	..	0·03	..	..	..	..	..	..	..
13	..	..	..	..	..	..	0·01	0·07	..	..	..	..	..	..
14	0·17	0·12	..	..	..	..	..	0·11	0·01	..	..	..	..	0·02
15	0·46	0·58	1·61	0·14	0·80	0·85	0·17	0·05	0·09	..	..	0·18	0·34	0·58
16	..	0·19	..	0·29	0·15	0·24	..	0·15	0·25	0·02	..	..	..	0·06
17	..	..	0·03	0·01	..	..	..	..	..	..	0·20	..	..	..
18	..	0·02	..	0·19	0·30	0·05	..	..	..	0·01	..	0·01	..	..
19	..	..	0·23	0·42	0·01	0·02	..	0·12	..	..	0·12	0·06	..	0·01
20	0·06	..	..	..	0·02	0·22	0·03	0·03	0·15	..	..	..	..	..
21	..	..	0·05	..	..	0·21	0·07	..	0·07	0·04	0·53	0·02	..	..
22	..	..	..	..	..	..	..	..	..	..	..	..	..	0·01
23	..	0·09	..	..	..	..	..	..	0·03	..	..	..	..	..
24	..	0·06	..	..	..	..	..	..	0·01	..	..	..	..	..
25	..	..	..	..	..	..	0·04	0·05	0·14	0·10	..	1·44	0·39	0·05
26	..	..	..	..	..	..	..	..	..	..	..	..	0·01	..
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	0·07	..	..	..	..	..	..	..	..	..	..	..	..
29	..	0·01	..	..	..	0·09	0·07	0·01	0·02	0·08	0·04	1·95	0·69	0·87
30	..	..	..	..	0·01	0·16	..	0·51	0·31	0·14	0·07	0·02	..	..
31	..	..	..	..	0·01	0·01	..	0·05	0·09	..	..	0·16	0·41	0·11
Total .	1·08	1·67	2·02	1·58	1·91	1·97	1·17	1·59	1·97	1·13	1·02	4·31	2·53	3·27

RAINFALL (IN INCHES), 1931.

(Totals for periods of sixty minutes from full hour to full hour of local mean time.)

JUNE. (FROM PLUVIOGRAPH RECORDS.)

Hours. 14–15	15–16	16–17	17–18	18–19	19–20	20–21	21–22	22–23	23–24	Daily Total.	Maximum fall in one hour.	Time of occurrence. H. to H.	Daily* total by Newman.	Date.
..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
..	..	..	..	..	..	..	..	..	..	..	..	..	..	9
..	..	..	..	..	..	..	..	..	..	0·01	0·01	5 6	0·01	10
..	..	..	..	..	..	..	..	..	..	..	..	..	..	11
..	..	..	..	..	..	..	0·01	..	..	0·01	0·01	21 22	0·01	12
0·03	0·01	0 01	..	..	..	..	..	..	..	0·28	0·08	10 11	0·41	13
0·10	0·02	0·05	..	..	..	..	..	..	..	1·96	1·11	7 8	2·14	14
..	..	..	..	..	..	..	..	..	..	..	..	..	..	15
..	..	..	..	..	..	..	..	..	..	..	..	..	..	16
..	..	..	..	..	..	..	..	..	..	..	..	..	..	17
..	..	..	..	..	..	..	..	..	..	0·01	0·01	2 3	0·01	18
..	..	..	..	..	..	..	..	..	..	..	..	..	..	19
..	..	..	..	..	..	..	..	..	..	..	..	..	..	20
..	..	..	..	..	..	..	..	..	..	0·15	0·07	9 40	0·17	21
..	..	..	..	..	..	..	..	..	..	..	..	..	..	22
..	..	..	..	..	..	..	..	..	..	..	..	..	..	23
..	..	..	..	..	..	..	..	..	..	..	..	..	..	24
..	..	..	..	..	0·13	0·02	..	..	0·01	0·24	0·13	19 20	0·26	25
..	0·01	..	..	..	..	..	..	..	..	0·01	0·01	15 16	0·01	26
..	..	..	..	..	..	..	..	..	..	0·03	0·03	5 6	0·05	27
..	..	..	..	..	..	..	..	..	..	2·17	0·70	11 12	2.20	28
..	..	..	..	..	..	..	..	..	0·02	0·41	0·21	8 9	0·44	29
0·02	0·17	0·23	0·11	..	..	..	..	..	0·02	1·79	0·40	13 14	1·95	30
0·15	0·21	0·29	0·11	..	0·13	0·02	0·01	..	0·05	7.07	..	..	7·66	Total.

JULY.

0·43	0·20	0·48	0·08	..	0·29	0·02	..	0·08	..	2·69	0·48	16 17	2·84	1
0·11	0·07	0·06	0·01	0·01	..	..	..	..	..	2.28	0·74	13 14	2·60	2
..	0·07	..	..	0·47	0·07	0·02	0·10	..	..	1·03	0·47	18 19	1·09	3
..	..	..	..	..	0·03	0·01	0·19	0·05	0·02	0·55	0·23	4 5	0·61	4
0·16	0·03	..	..	..	0·01	..	..	0·10	0·12	0·99	0·18	0 1	1·07	5
..	..	..	..	..	..	..	..	..	..	0·57	0·20	3 4	0·60	6
..	..	0·03	..	0·03	0·01	..	..	..	..	0·96	0·76	6 7	0·99	7
0·14	..	..	..	..	..	..	..	..	..	0·27	0·14	14 15	0·27	8
0·39	0·08	..	..	..	..	..	..	..	..	1·20	0·39	14 15	1·28	9
0·16	..	..	..	..	..	..	..	..	..	0·68	0·24	9 10	0·70	10
..	..	..	0·12	0·07	..	..	..	..	0·07	0·94	0·37	9 10	1·08	11
0·12	0·11	0·05	..	0·02	0·04	..	..	..	..	0·39	0·12	14 15	0·39	12
..	..	..	..	0 09	..	..	0·03	0·51	0·01	0·72	0·51	22 23	0·76	13
0·03	0·02	..	0·01	0 23	0·03	0 09	0·07	..	0·81	1·72	0·81	23 24	1·87	14
0·98	0·60	0·20	0·83	0 35	0·03	0·13	0·36	0·15	0·05	9·53	1·61	2 3	10·06	15
0·09	0·25	0·13	0·03	0·09	..	..	0·02	..	..	1·96	0·29	3 4	2·05	16
..	..	..	..	0·01	..	..	..	..	0·11	0·36	0 20	10 11	0·39	17
..	0·12	..	..	..	..	..	..	..	0·06	0·76	0·30	4 5	0·81	18
0·28	..	..	0·04	..	..	..	0·10	..	..	1·41	0·42	3 4	1·49	19
0·12	..	..	..	..	..	..	0·02	0·13	0·02	0·80	0·22	5 6	0·82	20
..	..	0·02	..	..	..	0·02	..	0·02	..	1·05	0·53	10 11	1·15	21
..	..	..	0·05	..	..	..	..	0·02	..	0·08	0·05	17 18	0·09	22
..	..	..	..	0·02	0·01	..	..	..	..	0·15	0·09	1 2	0·18	23
..	..	..	0·05	..	..	..	..	..	..	0·12	0·06	1 2	0·13	24
0·02	0·13	0·45	0·37	1 13	0·28	0·01	..	..	..	4·60	1·44	11 12	4·77	25
..	0·03	..	..	..	..	0·05	0·02	0·05	..	0·16	0·05	20 21	0·18	26
..	..	..	..	..	..	..	..	..	..	..	..	..	..	27
..	0·02	..	..	..	0 01	..	..	..	0·01	0·11	0·07	1 2	0·14	28
0 55	0 43	0·05	0·10	0·03	0·03	..	0·01	0·32	..	5·35	1·95	11 12	5·57	29
..	..	..	..	..	0·04	..	0·13	0·12	0·16	1·67	0·51	7 8	1·85	30
..	0·09	0·07	0·03	..	..	..	0·01	..	..	1·04	0·41	12 13	1·11	31
3·58	2·25	1·54	1·72	2·55	0·88	0.36	1·06	1·55	1·44	44·14	..	..	46·94	Total.

* Adopted as the standard instrument in the Observatory since 1845.

RAINFALL (IN INCHES), 1931.

(Totals for periods of sixty minutes from full hour to full hour of local mean time.)

AUGUST.

(FROM PLUVIOGRAPH RECORDS.)

Date.	Hours.												
	0–1	1–2	2–3	3–4	4–5	5–6	6–7	7–8	8–9	9–10	10–11	11–12	12–13	13–14
1	..	..	..	..	..	0·21	0·61	0·16	0·03	0·01	..	..	..	..
2	..	0·01	..	..	..	..	..	..	..	..	..	..	..	0·01
3	..	0·02	..	..	..	..	0·01	..	..	..	..	..	..	..
4	..	..	..	..	..	..	..	0·04	0·01	..	..	..	..	..
5	..	0·01	0·02	0·21	0·09	0·13	0·07	..	..	..	..	..	..	..
6	0·01	..	..	0·05	..	..	..	..	..	0·02	0·06	0·03	0·01	..
7	0·01	..	0·16	0·85	0·63	0·30	0·13	0·15	..	..	..	0·06	0·06	0·10
8	0·53	0·53	0·74	0·47	0·30	0·93	0·41	0·15	0·02	0·10	0·05	0·03	0.06	0·02
9	0·06	0·10	0·01	..	..	..	..	..	..	..	..	..	..	..
10	..	..	..	..	..	..	..	..	..	..	0·13	0·10	0·02	..
11	..	..	..	..	..	..	0·10	..	..	0·22	..	..	0 06	0·01
12	..	..	..	..	0·01	0·01	0·01	0·01	..	..	..	..	..	0·01
13	..	0·02	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..	..	..	0·03	0·06	0·02	0·03	0·02	0·01	..	..	..	..
15	..	..	0·01	..	..	0·01	0·01	..	..	..	0·03	..	..	..
16	0·02	0·01	0·03	0·01	..	..	..	..	0·04	..	0·12	..	0·05	0·01
17	..	0·03	0·10	0·05	0·03	0·01	..	..	..	..	..	..	0·01	0·03
18	..	..	..	..	..	0·03	..	..	..	..	..	0·09	0·01	..
19	0·01	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..	..	..	..	..	..	..	0·06
21	..	..	..	..	0·03	0·01	..	0·04	0·21	0·06	0·04	..	0·02	0·02
22	..	..	..	..	..	0·01	0·01	..	..	..	..	..	..	..
23	..	..	..	..	..	..	..	..	..	..	..	..	0·08	..
24	..	..	0·02	..	..	..	..	..	0·05	0·19	..	..	..	..
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	..	..	..	..	..	..	0·05	..
27	..	..	..	0·06	0·01	..	..	..	..	..	..	..	..	..
28	..	0·17	..	..	0·07	..	..	..	0 05	..	..	..	..	..
29	0·07	0·01	..	0·01	..	..	0·13	0·02	..	0·01	..	..	..	..
30	0·01	0·08	0·02	..	..	..	..	0 02	..	0·02	..	..	..	..
31	0 01	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ..	0·73	0·99	1·11	1·71	1·20	1·71	1·51	0·62	0·43	0·64	0·43	0·31	0·43	0·27

SEPTEMBER.

1	..	0·03	..	..	..	0·02	..	..	..	..	0·01	..	..	..
2	0·04	..	..	..	..	..	..	..	..	..	..	..	..	0·02
3	..	..	..	..	..	..	..	..	..	0·05	..	..	..	..
4	0·01	..	..	..	0·01	..	..	0·01	..	..	0·19	0·08	0·01	..
5	..	..	..	..	..	0·08	..	..	..	..	..	..	..	0·05
6	..	..	..	0·01	..	..	..	..	..	..	..	..	..	..
7	..	0·02	..	..	..	0·01	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..	..	..	..	..	0·03	0·02	..	..	..	..	..	..
15	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	..	0·43	0·11	0·23	0·38	0·16	0·01	..	..	..	..	..	..	..
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..	..	..	..	..	0·01	..	0·05
21	..	0·01	..	..	..	..	..	..	0·31	0·04	..	..	..	0·01
22	..	..	..	0·11	..	..	..	..	..	..	..	..	..	..
23	..	..	..	..	..	..	..	..	..	..	..	..	..	0·01
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..	..	..	..	..	0·10	0·01	0·03	..	..	..	..	..
28	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total .	0·05	0·49	0·11	0·40	0·39	0·27	0·14	0·04	0·34	0·09	0·20	0·09	0·01	0·14

(Totals for periods of sixty minutes from full hour to full hour of local mean time.)

AUGUST.

(FROM PLUVIOGRAPH RECORDS.)

Hours.										Daily total.	Maximum fall in one hour.	Time of occurrence.	Daily* total by Newman Raingauge.	Date.
14–15	15–16	16–17	17–18	18–19	19–20	20–21	21–22	22–23	23–24			H. to H.		
..	..	..	0·03	0·01	..	..	0·02	..	0·07	1·15	0·61	6 7	1·21	1
..	..	..	..	..	..	..	..	..	..	0·02	0·01	1 2	0·02	2
..	..	..	..	..	..	..	..	..	..	0·03	0·02	1 2	0·04	3
..	..	0·04	0·04	0·01	..	..	..	..	0·08	0·22	0·08	23 24	0·25	4
..	..	..	0·04	..	..	..	0·01	0·25	0·04	0·37	0·25	22 23	0·93	5
..	..	..	..	..	..	..	..	..	..	0·18	0·06	10 11	0·21	6
0·31	0·61	0·43	0·73	0·35	0·18	0·37	0·44	0·51	0·93	**7·31**	**0·93**	23 24	**7·59**	7
0·13	0·14	0·37	0·01	..	0·05	..	0·07	0·26	..	5·37	0·93	5 6	5·72	8
..	..	..	..	..	..	..	0·07	..	..	0·24	0·10	1 2	0·26	9
..	..	..	..	..	..	..	0·01	..	..	0·26	0·13	10 11	0·27	10
..	..	0·31	0·01	..	0·02	0·01	..	..	..	9·74	0·31	16 17	0·84	11
..	..	0·02	0·19	..	..	..	..	..	..	0·26	0·19	17 18	0·26	12
..	..	..	..	..	..	..	..	0·01	0·04	0·07	0·04	23 24	0·07	13
..	0·01	0·01	..	..	0·02	..	..	0·02	..	0·23	0·06	5 6	0·29	14
..	..	..	..	..	..	0·03	0·01	..	0·13	0·23	0·13	23 24	0·22	15
..	..	..	..	..	..	0·01	..	0·01	0·01	0·32	0·12	10 11	0·38	16
0·02	..	..	0·01	..	0·07	0·04	0·01	..	0·25	0·66	0·25	23 24	0·67	17
..	..	0·01	..	0·01	..	..	..	..	..	0·15	0·09	11 12	0·21	18
..	..	..	0·03	..	..	..	..	..	0·05	0·09	0·05	23 24	0·10	19
..	..	..	..	..	..	..	0·03	..	..	0·09	0·06	13 14	0·11	20
..	..	..	..	..	..	..	..	..	0·09	0·52	0·21	8 9	0·58	21
..	..	..	..	..	..	..	..	0·01	0·01	0·04	0·01	5 6	0·05	22
..	..	..	..	..	..	..	0·07	..	..	0·15	0·08	12 13	0·13	23
..	..	..	..	..	0·06	0·01	..	..	0·11	0·44	0·19	9 10	0·46	24
..	..	..	..	..	..	..	..	..	..	..	..	..	..	25
..	0·02	..	..	..	0·01	0·01	..	..	..	0·09	0·05	12 13	0·10	26
0·03	0·02	0·01	..	..	0·02	..	..	..	0·11	0·26	0·11	23 24	0·31	27
0·06	0·01	0·01	0·01	0·01	..	..	..	..	0·18	0·57	0·18	23 24	0·56	28
..	..	..	..	..	0·14	0·02	0·04	..	0·06	0·51	0·14	19 20	0·58	29
..	..	0·02	..	..	0·02	0·02	0·01	..	0·02	0·24	0·08	1 2	0·26	30
..	..	..	..	..	..	..	..	..	..	0·01	0·01	0 1	0·01	31
0·55	0·81	1·23	1·10	0·39	0·59	0·52	0·79	1·07	2·18	21·32	..	..	22·69	Total.

SEPTEMBER.

..	..	0·01	..	..	..	..	..	0·02	0·01	0·10	0·03	**1 2**	0·13	1
..	..	..	..	..	..	..	0·15	..	..	0·21	0·15	21 22	0·19	2
..	..	..	..	..	..	..	0·01	..	0·02	0·08	0·05	9 10	0·09	3
..	..	..	0·04	0·01	0·01	..	..	..	..	0·37	0·19	10 11	0·41	4
..	..	..	..	..	..	0·06	..	..	..	0·19	0·08	5 6	0·15	5
..	..	..	..	..	..	..	..	..	..	0·01	0·01	3 4	0·02	6
..	..	..	..	..	..	..	..	..	..	0·03	0·02	1 2	0·04	7
..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
..	..	..	..	..	..	..	..	..	..	..	..	..	..	9
..	..	..	..	..	..	..	..	..	..	..	..	..	..	10
..	..	..	..	..	..	..	..	..	..	..	..	..	..	11
..	..	..	..	..	..	..	..	..	..	..	..	..	..	12
..	..	..	..	..	..	..	..	..	..	..	..	..	..	13
..	..	..	..	..	..	..	..	..	..	0·05	0·03	6 7	0·07	14
..	..	..	..	..	..	..	..	..	..	..	..	..	..	15
..	..	..	..	..	..	..	..	..	..	..	..	..	..	16
..	..	..	..	..	..	..	..	..	..	..	..	..	..	17
..	0·01	..	..	0·25	0·20	0·03	..	..	..	**1·86**	0·43	1 2	**1·89**	18
..	..	..	..	..	..	0·06	..	..	..	0·06	0·06	20 21	0·08	19
..	..	..	..	..	..	..	..	..	..	0·06	0·05	13 14	0·07	20
..	0·01	0·02	0·50	..	..	..	..	..	..	0·90	**0·50**	17 18	0·93	21
..	..	..	..	..	..	..	..	..	..	0·11	0·11	3 4	0·14	22
..	..	..	..	..	..	..	..	..	..	0·01	0·01	13 14	0·01	23
..	..	..	..	..	..	..	..	..	..	..	..	..	..	24
..	..	..	..	..	..	..	..	..	..	..	..	..	..	25
..	0·11	..	..	0·01	..	0·01	..	..	..	0·13	0·11	15 16	0·14	26
..	..	..	..	..	..	..	..	..	..	0·14	0·10	6 7	0·12	27
..	..	..	..	..	..	..	..	..	..	..	..	..	..	28
..	..	..	..	..	..	..	..	..	..	..	..	..	..	29
..	..	..	..	..	..	0·01	0·02	..	0·01	0·04	0·02	21 22	0·05	30
..	0·13	0·03	**0·54**	0·27	0·21	0·17	0·18	0·02	0·04	4·35	..	..	4·53	

* Adopted as the standard instrument in the Observatory since 1845.

RAINFALL (IN INCHES), 1931.

(Totals for periods of sixty minutes from full hour to full hour of local mean time.)

(FROM PLUVIOGRAPH RECORDS.

OCTOBER.†

Date.	Hours.													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
1	0·01	0·02	0·01	0·02	0·02	0·03	0·04	0·03	0·05	0·09	0·02	..	..	..
2	0·23	0·27	0·03	..	..	..	..	..	..	..	..	..	..	0·04
3	..	..	..	0·01	0·03	0·01	..	..	..	..	..	..	..	..
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	0·05	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..	0·01	0·05	..	0·11	..	..	..	..	..	..	..	..
7	..	..	..	0·05	..	0·14	0·31	..	..	..	..	..	..	..
8	..	..	0·02	..	..	..	..	0·02	..	..	..	..	..	..
9	..	..	..	..	..	0·01	..	..	..	..	..	..	0·04	0·07
10	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	..	0·02	0·01	..	..	..	0·10	0·03	..	..	..	..	..	..
12	0·02	0·07	..	..	..	..	..	0·09	0·04	..	..	..	..	0·65
13	..	0·02	..	0·06	0·50	0·03	0·03	0·28	0·20	..	..	..	..	..
14	0·04	0·04	..	0·23	..	0·03	..	0·01	..	..	..	..	0·05	0·02
15	..	0·18	..	..	..	..	..	..	..	..	..	..	0·06	..
16	..	..	..	0·35	0·01	..	..	0·01	..	0·26	0·63	0·11	0·14	0·07
17	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total .	0·35	0·62	0·08	0·77	0·56	0·36	0·48	0·47	0·29	0·35	0·65	0·11	0·29	0·85

NOVEMBER.†

1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	0·03	0·14	0·32	0·85	0·37	0·20	0·04	..	..	0·24	0·02
Total .	..	..	..	0·03	0·14	0·32	**0·85**	0·37	0·20	0·04	..	..	0·24	0·02

DECEMBER.†

12	..	..	..	..	..	..	..	..	..	..	..	..	0·02	0·06
13	..	..	0·06	0·06	..	..	..	..	..	..	..	..	..	..
Total .	..	..	0·06	0·06	..	..	..	..	..	..	..	..	0·02	0·06

† No rainfall occurred on the days of the month not mentioned in this table.

(Totals for periods of sixty minutes from full hour to full hour of local mean time.)
(FROM PLUVIOGRAPH RECORDS.)

OCTOBER.†

Hours.										Daily total.	Maximum fall in one hour.	Time of occurrence.	Daily* total by Newman Raingauge.	Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			H. to H.		
..	..	..	..	..	..	..	..	0·01	0·20	0·55	0·20	23 24	0·61	1
0·01	..	..	..	..	..	..	..	..	..	0·58	0·27	1 2	0·57	2
..	..	0·01	0·02	0·02	0·08	0·03	..	..	..	0·21	0·08	19 20	0·25	3
..	..	..	..	..	..	..	0·15	..	..	0·15	0·15	21 22	0·15	4
..	..	..	..	..	..	..	..	..	..	0·05	0·05	0 1	0·05	5
..	..	..	..	..	..	..	..	1·02	0·26	1·45	1·02	22 23	1·46	6
..	..	..	..	..	..	..	..	..	..	0·50	0·31	6 7	0·54	7
..	..	..	..	..	..	..	..	..	..	0·04	0·02	2 3	0·04	8
..	..	..	..	..	0·01	..	..	..	..	0·13	0·07	13 14	0·15	9
..	..	..	..	..	..	..	0·02	..	0·02	0·04	0·02	21 22	0·08	10
..	..	..	0·15	0·32	0·07	0·67	0·24	0·08	0·21	1·90	0·67	20 21	1·98	11
0·16	0·12	0·02	0·01	0·02	..	..	..	0·56	0·01	1·77	0·65	13 14	1·91	12
..	0·17	0·03	..	..	0·03	..	..	..	0·03	1·38	0·50	4 5	1·47	13
0·03	0·04	0·10	0·02	..	..	..	..	0·09	..	0·70	0·23	3 4	0·72	14
..	..	..	..	..	..	..	..	..	..	0·24	0·18	1 2	0·26	15
0·08	0·46	0·50	0·01	..	..	..	..	..	..	2·63	0·63	10 11	2·75	16
..	..	..	..	0·01	0·01	..	..	..	..	0·02	0·01	18 19	0·03	17
0·28	0·79	0·66	0·21	0·37	0·20	0·70	0·41	1·76	0·73	12·34	..	..	13·02	Total.

NOVEMBER.†

..	..	..	..	..	..	..	0·01	..	..	0·01	0·01	21 22	0·02	1
..	..	..	..	..	..	..	..	..	..	2·21	0·85	6 7	2·38	2
..	..	..	..	..	..	..	0·01	..	..	2·22	..	..	2·40	Total.

DECEMBER.†

0·08	0·06	0·03	0·02	..	..	..	0·02	0·02	0·03	0·34	0·08	14 15	0·39	12
0·04	0·07	0·01	..	..	..	..	..	..	..	0·24	0·07	15 16	0·03	13
0·12	0·13	0·04	0·02	..	..	..	0·02	0·02	0·03	0·58	..	..	0·69	Total.

* Adopted as the standard instrument in the Observatory since 1845.

† No rainfall occurred on the days of the month not mentioned in this table.

NOTE.—There was a fall of 0·01″ of rain between 5h and 6h on the 22nd April. The months of January, February, March and May were dry.

Total fall of rain in the year was 92·03″ by Pluviograph and 97·94″ by Newman; the difference is due to the difference in heights of the receiving funnels of the two instruments.

Total number of rainy days in the year was 83 according to Pluviograph and 86 according to Newman, assuming a "rainy day" to be one on which a tenth of an inch of rain or upwards has fallen.

The greatest fall of rain during a day in the year, that of 15th July, was 9·53″ by Pluviograph and 10 06″ by Newman.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JANUARY. (IN MILES PER HOUR.)

Date.	Hours.														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	7	8	12	14	13	14	14	15	17	16	14	12	10	6	12
2	6	6	6	8	12	13	14	15	14	13	11	10	7	7	10
3	4	4	6	8	11	11	9	10	10	11	8	5	4	8	9
4	5	8	5	8	8	9	8	8	8	4	4	4	5	9	11
5	9	10	12	12	12	11	11	12	14	14	20	15	14	10	6
6	5	5	7	7	9	12	13	13	11	10	7	5	5	5	8
7	3	3	5	3	5	6	7	7	6	6	5	5	5	8	9
8	6	6	5	5	5	7	6	7	11	13	11	5	8	9	11
9	9	10	8	9	10	7	5	3	3	7	5	5	13	16	16
10	9	9	9	10	11	11	12	11	7	5	7	12	14	17	19
11	8	8	8	11	7	8	7	10	11	6	7	11	13	13	15
12	6	7	6	7	7	7	7	8	10	11	9	5	6	9	11
13	5	5	5	8	8	6	6	6	6	7	5	4	6	8	10
14	4	5	7	7	7	7	7	11	12	12	8	6	6	10	11
15	8	8	7	7	7	6	7	7	7	7	6	5	4	8	12
16	6	7	7	6	7	8	8	5	5	7	7	5	8	8	10
17	5	5	5	9	7	7	6	5	5	6	4	4	5	6	7
18	3	5	7	8	8	6	7	8	6	7	5	4	7	8	12
19	7	8	8	7	6	8	8	5	7	8	5	5	7	9	10
20	6	7	6	8	10	9	7	7	7	7	4	5	7	5	6
21	5	5	7	6	5	5	6	6	10	7	5	8	11	12	13
22	6	6	6	5	5	5	6	4	5	10	6	5	9	13	15
23	6	5	6	7	6	5	5	5	8	10	12	14	12	11	11
24	5	6	6	5	7	7	9	9	7	8	5	6	6	8	9
25	7	7	7	8	7	9	10	9	8	9	13	11	9	11	13
26	7	7	7	7	7	8	8	6	6	9	12	13	14	16	16
27	9	6	7	7	7	9	6	6	9	6	4	7	9	10	11
28	6	6	7	5	7	7	7	7	5	3	6	13	13	12	11
29	4	3	5	7	6	7	6	4	5	11	11	12	13	14	15
30	10	8	5	8	9	11	9	7	7	6	5	6	10	12	13
31	7	8	8	6	7	7	7	5	5	5	7	12	13	13	13
Mean ..	6·2	6·5	6·8	7·5	7·8	8·2	8·0	7·8	8·1	8·4	7·7	7·7	8·8	10·0	11·5

FEBRUARY.

1	8	8	6	7	6	5	6	3	5	5	5	4	9	11	11
2	7	7	7	6	5	6	5	3	3	7	9	11	10	12	12
3	7	11	12	8	8	8	6	4	7	7	11	16	16	14	15
4	8	10	11	11	11	9	9	10	8	8	6	12	15	19	20
5	10	10	9	8	9	9	10	7	8	7	7	7	8	10	14
6	11	10	9	8	7	7	8	4	7	6	5	5	5	6	8
7	4	4	5	7	7	6	7	7	5	7	8	10	9	9	10
8	4	5	6	7	9	6	4	3	7	7	10	12	16	14	14
9	7	7	6	6	5	8	8	5	6	7	6	9	12	12	13
10	7	9	8	8	8	8	6	6	7	8	5	10	11	13	20
11	5	5	7	9	8	5	7	8	6	7	10	17	18	22	21
12	9	9	8	9	7	6	8	7	6	7	10	13	17	18	20
13	9	9	7	6	5	7	7	2	2	3	7	9	10	11	12
14	9	9	11	10	9	11	11	7	5	5	4	6	13	15	15
15	8	7	5	11	14	12	9	5	1	3	11	7	13	16	16
16	12	12	12	8	7	11	11	13	10	8	6	4	7	11	11
17	12	13	13	7	6	6	6	9	13	9	7	6	8	13	16
18	14	7	7	7	9	7	9	11	12	7	6	13	17	16	17
19	11	9	10	15	15	10	9	8	11	12	12	13	13	12	12
20	2	4	3	3	5	6	7	7	7	5	5	4	6	7	10
21	4	4	6	6	9	8	6	7	6	7	5	4	10	15	16
22	4	5	5	6	5	5	5	5	8	10	14	16	14	13	13
23	5	5	5	6	7	7	6	5	8	9	10	13	13	13	14
24	10	7	9	7	7	7	7	7	8	10	11	15	16	20	25
25	12	10	9	8	6	7	7	6	7	5	10	10	12	14	15
26	7	7	5	6	9	12	10	8	12	9	6	6	13	13	13
27	6	11	11	13	13	13	13	9	7	7	6	9	15	16	17
28	9	11	11	12	12	13	14	8	5	11	7	3	9	12	15
Mean ..	7·9	8·0	8·0	8·0	8·1	8·0	7·9	6·6	7·0	7·3	7·8	9·4	12·0	13·5	14·8

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JANUARY. (IN MILES PER HOUR.)

Hours.									Mean.	Mean by R. Peckley's Anemograph.	Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
15	14	13	13	13	11	11	10	8	12·2	8·3	8 25	22	14 20	4	1
11	12	13	14	15	13	12	8	6	10·7	7·2	19 52	21	13 15	4	2
10	12	16	14	15	11	6	6	5	8·9	5·9	17 40	21	12 10	4	3
12	13	16	15	12	9	10	9	6	8·6	5·8	18 20	21	8 50	2	4
6	6	8	10	10	9	7	6	5	10·4	7·4	10 50	27	15 56	5	5
9	7	5	5	4	3	2	3	3	6·8	4·4	6 58	15	9 45	2	6
11	10	11	9	7	6	5	7	8	6·5	4·3	15 35	16	1 13	3	7
12	12	13	12	10	6	6	7	8	8·4	5·7	9 12	19	8 0	1	8
17	17	17	14	13	13	12	10	8	10·3	7·2	17 30	21	8 0	1	9
21	20	19	18	16	15	14	10	8	12·7	9·0	15 35	25	10 32	2	10
17	18	18	17	16	12	8	7	6	10·9	7·6	17 15	25	9 25	3	11
14	15	14	13	12	12	10	9	7	9·3	6·3	16 45	21	7 27	4	12
9	9	11	10	10	8	7	6	4	7·0	4·6	17 35	16	7 40	3	13
10	12	11	10	7	6	6	6	5	8·0	5·5	14 20	16	1 5	3	14
11	10	12	13	11	10	9	7	8	8·2	5·7	18 38	17	12 15	3	15
12	13	14	12	12	9	6	5	5	8·0	5·6	17 6	20	8 15	1	16
10	8	9	10	10	6	5	3	2	6·2	4·1	19 12	14	8 15	1	17
15	15	15	14	14	7	5	5	8	8·3	6·0	16 2	22	0 5	2	18
14	17	14	14	13	10	7	7	7	8·8	5·9	16 20	20	7 50	1	19
9	9	11	10	6	6	6	4	3	6·9	4·7	17 58	14	10 43	1	20
13	13	15	12	11	12	8	6	6	8·6	6·0	17 20	19	10 57	1	21
15	15	15	16	15	13	9	8	7	9·1	6·1	18 22	21	8 15	2	22
12	12	11	10	11	10	8	7	7	8·8	6·0	11 15	20	8 17	3	23
8	9	8	8	7	7	6	6	5	7·0	4·8	16 48	13	12 10	3	24
15	18	19	19	18	16	12	9	8	11·3	7·9	17 50	28	8 40	4	25
18	17	16	14	15	15	13	13	10	11·4	8·3	13 42	23	8 59	3	26
11	10	12	10	8	5	3	5	5	7·6	5·4	17 55	16	11 8	2	27
14	17	15	13	13	10	9	8	4	9·1	6·4	17 12	21	10 8	2	28
16	16	16	16	12	10	5	6	6	9·4	6·8	16 42	22	8 15	2	29
12	17	17	15	14	13	9	7	6	9·8	7·0	17 45	22	11 20	2	30
14	10	10	9	9	8	7	7	8	8·5	5·8	13 7	18	9 8	1	31
12·7	13·0	13·4	12·5	11·6	9·7	7·8	7·0	6·2	9·0	6·2					Mean.

FEBRUARY.

13	13	13	15	16	11	7	5	6	8·3	5·7	17 45	21	7 50	2	1
17	17	14	11	10	10	8	6	9	8·8	6·1	15 54	23	11 50	3	2
21	21	19	17	17	13	14	14	14	12·5	8·5	16 35	30	7 45	2	3
20	20	20	21	20	18	17	11	10	13·5	9·5	18 40	30	10 55	2	4
19	20	14	13	14	15	13	13	11	11·0	7·6	16 25	25	9 40	3	5
8	7	7	8	7	6	4	4	4	6·7	4·2	19 12	10	7 50	2	6
10	10	10	7	8	9	8	6	4	7·4	4·8	15 0	15	8 30	3	7
12	14	14	13	13	12	10	9	7	9·5	6·7	14 6	21	7 30	2	8
17	17	18	17	16	17	16	16	7	10·7	7·4	17 54	24	8 30	2	9
20	20	20	20	18	10	8	8	6	11·0	7·8	14 50	28	10 50	2	10
24	22	22	20	21	16	10	10	7	12·8	9·0	15 45	31	8 16	2	11
19	20	20	20	20	19	15	11	10	12·8	9·1	16 50	28	8 15	2	12
12	12	12	10	9	8	9	9	9	8·2	5·6	12 56	17	7 45	0	13
15	21	21	17	17	14	12	11	9	11·5	7·7	15 20	28	11 2	1	14
18	19	17	17	17	15	7	8	11	11·1	7·4	15 45	27	9 5	1	15
15	17	21	18	16	13	9	10	10	11·3	7·9	17 2	28	9 10	2	16
16	17	16	16	16	14	10	7	15	11·3	7·9	16 3	24	11 25	2	17
18	18	21	20	19	15	11	7	10	12·4	8·8	18 58	28	10 55	2	18
12	12	11	11	10	7	6	4	2	10·3	7·3	11 5	18	23 45	2	19
12	11	10	9	9	8	8	7	5	6·7	4·4	15 28	15	9 5	2	20
14	12	10	8	7	7	7	6	4	7·8	5·3	14 30	20	11 12	2	21
13	12	13	13	14	14	11	6	5	9·5	6·8	11 15	23	9 25	1	22
16	15	15	15	14	14	13	11	12	10·5	7·5	15 2	23	7 25	2	23
24	23	23	22	22	19	17	16	14	14·4	10·1	15 20	32	8 35	4	24
15	16	16	14	9	7	7	9	9	10·0	7·2	16 43	26	9 28	1	25
17	20	20	15	13	13	11	10	7	10·9	7·5	17 25	27	11 50	3	26
17	14	13	14	14	15	7	5	8	11·4	7·8	15 20	24	11 25	1	27
17	18	19	17	16	13	12	10	10	11·8	8·5	16 52	27	8 50	2	28
16·1	16·4	16·0	14·9	14·4	12·6	10·3	8·9	8·4	10·5	7·3					Mean.

WIND VELOCITY, 1931.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MARCH. (IN MILES PER HOUR.)

Date.	Hours.														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	7	5	5	8	9	11	9	5	7	7	4	10	12	14	15
2	5	7	10	8	7	6	3	3	3	4	8	9	9	12	13
3	5	5	3	4	3	3	5	6	6	5	8	8	10	9	11
4	7	7	8	7	7	8	8	9	10	11	12	18	19	20	25
5	8	9	13	13	14	14	11	11	12	10	13	15	12	16	18
6	7	5	5	6	7	8	8	7	7	13	13	11	11	13	13
7	10	9	10	7	5	5	5	9	7	4	3	9	10	12	13
8	9	10	8	8	7	8	9	8	7	8	9	10	11	11	11
9	10	13	13	10	13	14	15	16	15	9	11	13	11	9	9
10	2	6	3	3	3	3	5	5	5	5	5	5	9	12	13
11	3	9	9	7	8	9	7	6	5	5	4	10	11	13	14
12	3	4	5	6	4	5	3	3	6	6	9	10	12	12	13
13	9	7	5	5	4	5	9	7	5	4	4	6	10	13	12
14	6	7	9	11	5	6	6	6	7	8	14	14	14	14	14
15	6	6	6	5	5	7	6	7	7	9	11	12	11	13	16
16	8	13	12	9	7	7	7	5	7	7	11	9	13	15	16
17	9	14	12	14	15	11	10	11	14	12	13	17	20	20	23
18	17	13	12	10	13	12	10	11	12	13	21	21	21	24	23
19	12	11	7	5	5	3	5	10	9	7	9	11	11	11	11
20	7	5	3	5	12	9	10	6	2	3	6	9	10	9	9
21	7	9	10	6	5	10	13	9	7	4	9	10	11	13	14
22	17	17	14	8	8	8	5	5	8	5	8	10	12	11	13
23	15	10	10	10	7	7	6	5	5	7	10	13	14	15	16
24	8	7	5	6	7	7	9	8	7	11	10	12	15	16	15
25	11	9	4	5	5	4	4	3	5	5	7	9	14	13	14
26	5	7	4	3	5	6	6	7	7	8	10	11	12	14	13
27	5	5	5	4	5	4	3	5	5	5	5	8	11	13	13
28	5	6	5	5	5	5	3	5	6	7	10	13	12	14	16
29	8	10	8	4	3	3	4	5	4	4	11	12	13	12	14
30	7	7	8	6	5	4	3	3	5	4	7	11	14	15	15
31	11	10	6	6	7	6	8	7	3	6	11	14	17	16	16
Mean ..	8·0	8·5	7·6	6·9	6·9	7·0	6·9	6·9	6·9	7·0	9·2	11·3	12·6	13·7	14·5

APRIL.

1	7	4	5	4	4	2	5	7	7	4	5	6	8	11	9
2	3	3	4	5	5	8	11	7	9	11	8	8	9	11	9
3	3	2	3	4	4	3	3	5	5	6	6	12	12	15	18
4	12	13	12	9	9	7	6	7	6	5	5	9	12	14	13
5	6	5	6	7	8	10	10	9	9	10	9	10	11	14	14
6	5	3	3	4	5	9	10	11	9	10	8	10	12	12	11
7	6	2	2	2	4	4	2	5	7	7	6	8	9	10	12
8	5	6	4	6	11	9	7	9	10	10	8	9	10	10	11
9	4	2	2	2	2	2	2	6	5	3	6	8	9	12	13
10	8	7	8	5	4	7	9	7	4	3	8	11	12	13	15
11	7	5	9	8	5	3	8	4	3	4	6	9	11	15	14
12	3	6	9	9	8	6	4	4	5	8	10	13	15	16	16
13	7	7	9	10	7	7	6	7	7	4	5	10	13	13	14
14	2	2	3	5	4	3	2	1	1	1	6	9	11	12	12
15	10	7	8	6	3	3	6	5	3	3	7	9	10	10	11
16	6	5	5	6	5	5	3	5	5	6	7	9	9	13	13
17	6	5	3	3	5	5	7	7	5	5	5	10	10	11	13
18	9	5	5	5	5	4	2	2	5	4	9	9	12	13	14
19	5	11	16	11	6	7	6	5	5	6	6	12	15	17	20
20	16	15	7	9	8	7	7	8	11	10	12	16	16	18	18
21	15	16	18	17	10	6	7	6	10	9	11	13	13	14	14
22	10	7	5	3	5	3	3	7	6	4	8	9	13	16	14
23	2	1	6	5	3	4	4	3	7	7	9	10	12	15	16
24	5	8	12	14	13	13	11	9	6	6	8	10	11	13	13
25	4	6	9	10	7	7	5	4	3	5	6	8	11	13	15
26	6	2	2	2	2	3	4	3	3	7	10	15	17	18	17
27	15	10	3	4	4	5	3	5	8	13	20	25	27	27	26
28	14	16	17	16	12	15	16	14	13	16	18	16	17	19	19
29	7	8	7	6	5	5	4	4	10	12	12	10	12	14	14
30	7	10	12	10	6	5	1	4	2	3	12	13	14	15	16
Mean ..	7·2	6·6	7·1	6·9	6·0	5·9	5·8	6·0	6·3	6·7	8·5	10·9	12·4	14·1	14·5

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MARCH. (IN MILES PER HOUR.)

Hours.									Mean.	Mean by R. Beckley's Anemograph.	Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
16	14	13	13	12	11	7	6	4	9·3	6·3	15 45	21	10 59	2	1
14	13	9	7	6	5	2	6	7	7·3	5·0	15 22	18	21 20	1	2
12	13	13	8	6	5	6	5	7	6·9	4·5	16 20	19	11 25	2	3
26	20	15	12	12	8	10	11	8	12·4	8.6	15 28	34	0 35	4	4
19	18	18	18	18	15	15	16	10	14·0	9·8	15 20	24	9 35	4	5
12	13	10	10	7	6	7	5	6	8·7	6·0	10 35	20	8 0	2	6
10	11	10	8	9	6	3	8	9	8·0	5·3	14 55	17	10 40	1	7
11	10	10	13	13	12	10	10	9	9·7	6·5	18 48	18	2 28	4	8
10	10	9	7	5	3	3	2	2	9·7	7·3	7 10	18	22 15	2	9
13	14	13	13	14	12	7	5	4	7·5	5·0	16 28	21	11 35	2	10
13	13	16	15	13	10	4	7	6	9·0	6·4	17 50	22	10 53	1	11
14	14	12	9	5	3	4	5	4	7·1	4·7	16 45	17	7 0	0	12
11	10	11	10	9	7	5	5	7	7·5	5·1	13 45	17	10 48	1	13
13	15	16	13	13	13	10	8	8	10·4	7·2	16 45	23	9 10	2	14
18	16	14	13	14	12	10	5	5	9·7	7·0	15 35	25	9 5	2	15
17	16	14	13	14	13	10	8	8	10·8	7·6	15 15	25	7 25	2	16
22	21	21	17	14	10	7	7	13	14·5	10·2	14 45	31	9 55	3	17
23	21	20	18	15	15	17	16	14	16·3	12.0	13 15	30	6 57	5	18
10	9	8	7	8	6	4	7	7	8·0	5·8	11 35	15	10 10	1	19
9	9	7	7	4	6	3	2	5	6·5	4·3	4 36	14	7 54	0	20
13	14	13	12	10	9	6	10	13	9·9	7·2	23 10	20	10 6	0	21
15	14	14	14	13	13	13	12	18	11·5	8·1	23 25	26	10 10	1	22
17	18	16	14	10	9	7	8	8	10·7	7·6	16 38	26	9 10	0	23
12	11	10	8	6	5	10	14	10	9·5	6·8	13 48	21	4 32	3	24
14	12	9	6	5	2	5	3	5	7·2	5·0	14 50	19	8 15	2	25
12	13	10	9	9	5	4	3	3	7·7	5·9	13 54	19	22 15	1	26
13	11	10	8	5	3	5	6	6	6·8	4·9	14 20	17	10 58	1	27
15	15	15	12	11	9	8	7	8	9·0	6·9	14 40	21	7 50	1	28
18	16	15	15	10	7	5	8	7	9·0	6·5	15 55	23	9 35	0	29
17	18	18	15	13	7	10	10	10	9·7	6·5	16 15	26	7 5	2	30
14	12	9	9	11	12	11	7	10	9·9	7·0	14 20	22	8 25	0	31
14·6	14·0	12·8	11·4	10·1	8·4	7·4	7·5	7·8	9·5	6·7					Mean.

APRIL.

11	10	10	7	5	8	7	8	4	6·6	3·8	13 15	16	9 20	1	1
11	11	10	10	6	5	4	5	3	7·3	4·7	14 35	18	9 55	0	2
19	14	13	13	12	10	4	9	12	8·6	6·4	15 15	23	3 12	1	3
14	16	15	13	13	10	6	5	5	9·8	6·9	16 35	23	10 5	0	4
15	14	13	10	9	10	10	9	5	9·7	7·1	16 25	22	10 30	2	5
11	10	9	7	6	5	5	6	6	7·8	4·8	12 55	17	1 35	2	6
11	10	9	7	7	5	5	5	5	6·3	3·9	14 45	15	3 25	1	7
11	12	9	7	5	2	1	1	3	7·3	5·4	14 15	16	22 5	1	8
14	13	13	10	8	5	2	4	8	6·5	4·7	15 28	18	6 30	0	9
16	16	15	12	12	12	9	11	11	9·8	7·3	16 58	21	7 0	0	10
16	17	18	16	13	10	8	5	5	9·1	6·7	17 45	26	8 20	0	11
16	16	16	10	9	4	4	7	8	9·3	6·6	17 12	23	7 25	2	12
16	14	10	5	2	2	9	9	8	8·4	5·8	15 45	20	9 50	0	13
13	13	11	7	5	3	10	15	15	6·9	4·6	22 30	20	10 5	0	14
15	17	14	14	13	10	9	8	5	8·6	6·1	16 5	20	9 59	1	15
14	15	15	12	10	7	5	6	3	7·9	5·1	17 45	19	6 59	0	16
16	15	14	12	10	12	12	12	9	8·8	6·5	15 54	21	10 45	0	17
14	15	14	15	16	13	14	13	6	9·3	7·0	19 25	25	7 0	0	18
22	24	22	19	14	14	15	18	17	13·0	9·7	16 35	31	8 20	0	19
18	17	15	12	9	15	14	14	15	12·8	9·4	13 40	24	6 50	3	20
13	12	12	11	9	5	7	11	11	11·3	8·1	2 50	25	18 55	1	21
12	10	9	10	9	9	7	4	3	7·7	5·4	14 0	19	6 50	1	22
14	13	13	13	12	4	1	1	5	7·5	5·5	13 50	21	7 40	0	23
13	14	13	13	11	8	8	5	5	10·1	7·5	15 55	19	9 5	2	24
14	15	16	17	19	16	17	15	9	10·5	7·6	19 6	30	8 4	0	25
20	20	20	19	19	20	17	16	15	11·5	8·6	15 54	30	7 25	0	26
24	22	19	16	16	17	16	16	14	14·8	11.0	13 5	36	7 20	1	27
19	19	15	12	11	11	12	11	12	15·0	11.3	15 40	27	10 5	5	28
14	16	15	14	13	10	6	7	8	9·7	7·3	16 2	22	7 32	1	29
17	16	16	14	12	8	7	6	5	9·6	7·4	15 35	25	6 28	0	30
15·1	14·9	13·8	11·9	10·5	9·0	8·4	8·7	8·0	9·4	6·7					Mean.

WIND VELOCITY, 1931.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY. (IN MILES PER HOUR.)

Date.	Hours.														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	5	1	1	4	5	3	3	4	6	8	12	12	13	13	14
2	11	10	9	5	4	3	5	3	6	6	8	8	12	13	13
3	6	5	3	3	3	3	2	3	6	12	14	14	12	10	12
4	1	1	2	3	2	3	1	1	5	11	14	12	12	13	15
5	9	8	9	6	3	3	2	3	6	5	8	11	12	13	13
6	9	8	8	8	5	5	3	2	3	7	9	9	11	11	12
7	5	5	5	3	3	2	1	3	8	9	10	10	10	12	12
8	8	8	7	6	5	5	5	4	5	5	8	10	10	10	10
9	9	9	9	7	7	7	6	6	7	7	8	10	11	11	11
10	6	5	5	6	6	6	5	4	6	6	7	8	8	10	10
11	5	7	7	5	4	3	4	4	4	6	7	8	11	11	11
12	6	6	5	5	7	5	5	1	1	4	5	5	5	8	10
13	5	5	5	5	5	5	3	4	5	6	8	9	9	10	12
14	8	10	8	7	5	6	6	7	8	11	12	10	11	12	13
15	9	9	8	5	5	5	5	6	6	6	7	8	9	11	12
16	4	6	7	7	7	5	5	5	5	5	9	10	10	12	12
17	5	6	5	4	2	2	1	2	3	4	6	7	7	10	10
18	8	7	6	6	5	5	5	3	3	5	6	7	7	9	9
19	5	5	4	4	3	4	3	3	4	6	5	7	7	7	8
20	7	5	6	6	6	6	5	4	3	5	6	7	7	9	9
21	4	3	5	5	5	4	3	1	1	6	6	8	10	12	13
22	5	5	5	3	3	3	2	2	5	7	10	11	10	11	13
23	6	5	2	3	3	4	6	6	7	8	11	12	13	12	14
24	7	6	4	2	2	1	2	7	12	18	18	16	15	13	13
25	6	4	3	5	3	5	11	13	13	12	10	11	13	13	12
26	7	6	3	4	5	5	4	4	4	6	6	8	10	11	11
27	7	8	7	7	6	5	4	5	2	3	5	7	9	11	12
28	7	6	6	5	7	5	5	6	3	6	7	8	9	10	14
29	10	8	7	7	6	4	2	2	1	1	6	10	13	14	15
30	10	12	9	6	4	4	2	3	4	3	5	9	14	16	17
31	9	11	11	9	5	4	5	11	10	7	9	12	15	18	21
Mean ..	6·7	6·5	5·8	5·2	4·5	4·2	3·9	4·3	5·4	6·8	8·5	9·5	10·5	11·5	12·4

JUNE.

1	9	8	8	8	7	6	3	5	8	10	11	12	15	16	17
2	6	7	11	9	8	5	4	4	5	5	6	8	13	14	15
3	9	7	7	5	7	7	7	6	8	10	12	13	14	15	17
4	4	8	8	9	8	7	7	7	9	10	10	13	14	15	17
5	10	10	11	10	11	10	9	10	11	12	12	13	13	14	14
6	7	7	8	7	8	8	8	10	9	11	11	11	11	12	12
7	10	10	9	9	10	10	10	9	8	8	10	10	11	13	13
8	9	8	9	9	10	11	9	7	7	8	11	12	13	13	13
9	7	7	8	8	7	8	6	6	6	8	9	10	11	11	12
10	11	12	11	10	10	17	15	18	20	13	22	22	23	24	25
11	27	24	21	20	20	19	17	17	20	26	28	28	28	26	26
12	30	26	21	21	22	25	25	23	24	25	32	33	35	36	34
13	30	27	29	26	26	23	26	21	28	28	24	23	20	18	22
14	14	11	13	9	15	19	19	4	13	14	9	6	9	12	15
15	16	16	16	15	13	13	12	15	18	22	19	19	20	19	15
16	7	5	4	5	4	4	4	5	7	9	5	7	8	9	7
17	5	5	5	5	5	4	3	4	5	6	7	9	9	8	9
18	5	4	6	4	4	3	2	4	4	5	6	7	9	10	13
19	6	6	8	9	8	8	7	8	6	8	10	9	7	9	11
20	5	5	7	10	11	8	9	9	8	9	9	10	10	10	9
21	10	9	9	9	9	9	13	14	14	10	3	5	14	14	9
22	9	7	5	12	12	13	12	11	12	13	12	12	10	11	16
23	12	10	16	16	14	15	16	13	13	11	11	10	14	12	13
24	8	10	9	10	10	9	7	7	8	9	8	9	8	9	7
25	9	8	6	7	9	8	3	9	6	7	9	9	10	9	9
26	6	7	5	5	6	6	3	3	4	9	8	8	6	7	9
27	7	7	7	6	6	5	2	3	7	2	3	6	6	8	9
28	15	7	14	11	13	10	8	11	10	10	5	7	13	11	9
29	4	7	9	9	9	10	9	6	7	14	17	15	11	9	8
30	10	7	3	3	13	12	11	12	15	15	18	17	14	16	24
Mean ..	10·6	9·7	10·1	9·9	10·5	10·4	9·5	9·4	10·7	11·6	11·9	12·4	13·3	13·6	14·3

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY. (IN MILES PER HOUR.)

Hours.									Mean.	Mean by R. Beckley's anemograph.	Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
14	14	13	13	9	9	9	10	10	8·5	6·5	15 10	18	1 25	0	1
13	13	10	13	10	9	9	5	6	8·5	5·8	18 50	19	8 15	1	2
11	9	10	10	10	7	5	2	1	7·2	5·0	12 45	19	6 40	0	3
15	17	13	12	10	9	9	9	9	8·3	5·9	15 45	22	6 45	0	4
12	11	12	10	9	9	10	11	10	8·5	6·1	13 25	18	6 45	0	5
12	11	10	8	11	11	10	9	7	8·3	6·0	14 10	16	7 30	0	6
12	12	11	9	8	8	7	7	9	7·5	4·5	14 40	19	6 0	1	7
10	10	7	7	7	10	11	8	8	7·7	4·8	11 50	17	10 15	0	8
11	10	9	9	8	8	6	6	7	8·3	4·7	14 35	17	9 50	1	9
11	11	9	7	6	8	8	7	7	7·2	4·7	15 30	16	7 25	0	10
10	11	11	9	8	9	8	7	5	7·3	5·1	18 20	16	8 25	0	11
13	12	13	11	9	8	8	7	7	6·9	4·9	15 12	18	7 20	0	12
11	10	11	10	9	9	8	7	7	7·4	4·5	20 6	17	6 25	0	13
15	14	10	10	10	9	8	8	8	9·4	6·1	15 30	20	8 16	2	14
13	13	14	13	10	7	6	5	5	8·2	6·0	17 40	18	10 12	1	15
13	16	17	16	13	12	9	9	7	9·2	6·9	17 25	23	7 15	1	16
12	12	11	9	7	5	6	7	8	6·3	3·8	15 35	18	10 12	0	17
10	9	8	7	7	6	6	6	5	6·5	4·2	14 50	14	8 42	0	18
10	10	8	7	6	6	6	7	7	5·9	3·7	17 3	14	8 15	0	19
11	10	8	6	6	5	4	4	5	6·3	3·8	15 50	14	8 50	0	20
12	12	10	7	6	5	6	6	5	6·5	4·5	14 16	17	8 20	0	21
12	12	12	14	12	10	10	8	7	8·0	5·9	18 50	17	7 40	0	22
17	17	16	15	15	11	9	10	10	9·7	7·6	17 50	23	7 25	1	23
12	11	10	10	11	8	8	7	8	9·2	6·4	10 35	24	6 25	0	24
14	13	14	14	11	11	13	10	8	10·1	7·2	18 5	20	5 0	1	25
13	12	12	11	9	8	8	7	8	7·6	5·0	15 30	18	7 20	0	26
13	14	13	13	10	8	7	8	7	8·0	6·0	16 20	19	7 40	0	27
17	16	16	14	13	11	10	5	9	9·2	6·9	16 15	22	7 35	1	28
16	17	17	17	14	12	9	11	8	9·5	7·1	17 4	22	6 10	0	29
17	17	16	13	11	10	11	9	7	9·5	7·3	16 40	24	7 25	0	30
22	21	18	16	14	11	11	11	10	12·1	9·0	16 55	28	6 50	1	31
13·0	12·8	11·9	11·0	9·6	8·7	8·2	7·5	7·3	8·2	5·7					Mean.

JUNE.

10	20	11	10	7	4	1	1	1	8·7	6·8	16 10	44	6 48	1	1
15	13	11	7	5	10	13	11	8	8·9	6·8	15 25	19	22 5	0	2
18	16	17	17	15	13	13	10	8	11·3	8·8	15 32	23	6 58	2	3
16	17	17	12	12	7	7	7	8	10·2	7·9	17 25	24	7 35	1	4
14	11	11	9	9	10	7	7	7	10·6	8·0	14 54	18	22 15	3	5
12	12	10	8	7	7	7	10	10	9·3	7·6	13 35	16	3 5	3	6
13	12	11	10	9	10	11	8	9	10·1	8·0	14 50	18	8 45	3	7
14	13	10	9	9	9	9	8	8	9·9	7·6	15 20	20	8 25	3	8
11	10	9	7	5	5	5	6	11	8·0	4·7	13 15	17	8 17	0	9
24	24	24	26	28	30	29	31	28	20·7	16·4	22 15	37	3 58	3	10
26	26	28	33	33	32	30	31	31	25·7	21·2	19 32	40	6 54	10	11
33	36	31	30	37	32	30	32	33	29·4	25·5	19 45	47	2 20	14	12
18	17	15	19	21	13	14	13	13	21·4	17·1	10 15	31	12 55	5	13
17	18	16	17	19	20	17	15	14	14·0	11·3	18 2	24	8 15	1	14
15	15	12	9	7	5	6	6	6	13·7	10·7	12 35	24	18 40	2	15
9	9	7	7	6	6	5	5	5	6·2	3·7	13 50	16	9 3	0	16
9	10	12	12	11	10	8	5	7	7·2	4·8	17 35	17	7 10	0	17
12	12	10	10	9	7	7	8	7	7·0	4·8	14 30	16	6 57	0	18
12	13	13	11	8	7	9	7	7	8·6	6·7	16 25	16	9 40	0	19
12	10	11	9	9	8	9	9	9	9·0	6·0	15 45	16	1 40	1	20
13	9	7	6	10	12	10	12	10	10·0	6·4	12 52	28	11 0	0	21
11	11	10	12	11	9	9	10	11	10·9	7·9	2 15	25	2 35	1	22
12	11	9	7	7	5	9	8	7	11·3	7·9	12 36	23	20 30	3	23
7	8	6	8	7	8	8	8	11	8·3	4·4	23 28	23	7 15	2	24
9	8	7	7	8	6	8	6	8	7·7	4·2	19 45	23	6 30	1	25
9	14	10	9	7	6	4	6	6	6·8	4·0	16 20	26	6 40	0	26
9	9	8	8	7	7	8	7	14	6·7	4·3	23 50	21	6 10	0	27
10	4	3	2	3	2	2	4	5	7·9	5·1	0 20	22	3 35	1	28
10	10	10	9	9	9	7	18	16	10·1	6·7	11 15	24	7 54	2	29
19	17	17	19	18	17	20	19	18	14·7	8·9	21 55	35	2 40	2	30
13·9	13·8	12·4	12·0	11·8	10·9	10·7	10·9	11·2	11·5	8·5					Mean.

WIND VELOCITY, 1931.

JULY.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

(IN MILES PER HOUR.)

Date.	Hours.														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	16	16	13	15	18	19	14	19	17	9	12	12	13	17	20
2	7	14	15	16	12	13	15	14	30	37	34	34	34	27	26
3	24	24	23	24	24	20	19	19	18	17	15	20	20	20	17
4	21	22	22	24	23	22	20	16	17	18	18	20	18	18	16
5	14	15	11	8	7	8	15	12	11	8	12	16	14	10	13
6	6	14	18	16	16	10	8	9	12	16	16	15	14	9	5
7	7	5	7	8	7	4	8	5	7	8	9	9	10	10	13
8	14	14	12	14	15	15	13	12	11	10	12	12	14	14	17
9	10	15	16	16	17	16	13	14	13	13	11	14	15	19	24
10	16	16	16	13	20	18	14	18	16	17	18	19	16	18	17
11	18	17	16	15	15	13	16	18	21	20	17	17	15	15	14
12	18	18	18	17	18	17	17	16	11	13	14	17	16	16	15
13	15	17	16	15	14	13	17	12	14	13	18	22	16	12	12
14	16	17	17	18	18	17	14	12	18	16	17	16	14	14	11
15	10	12	10	14	11	11	13	7	15	14	8	10	10	9	12
16	7	8	6	6	10	9	10	10	11	12	13	20	12	12	13
17	15	15	14	15	13	14	12	12	12	13	17	10	10	13	16
18	9	11	11	11	12	12	12	12	14	12	16	14	15	15	16
19	16	16	13	18	15	15	11	12	14	15	15	17	17	17	14
20	14	13	12	12	13	12	13	14	14	16	16	15	15	15	15
21	15	16	16	17	16	13	15	15	18	17	18	16	15	15	14
22	13	13	13	13	14	12	14	12	14	15	18	17	20	19	16
23	11	14	17	17	14	14	14	13	13	12	11	10	10	12	12
24	13	14	11	14	14	15	15	12	11	15	16	17	17	17	16
25	17	20	20	18	21	20	22	20	18	18	16	18	15	11	6
26	12	16	14	13	13	13	12	17	15	8	10	14	17	18	18
27	12	5	9	12	13	13	14	11	13	13	17	19	18	18	19
28	15	15	17	14	14	13	13	9	10	10	7	9	9	9	8
29	16	14	15	15	15	17	16	17	15	18	15	16	19	14	14
30	15	14	14	14	15	14	13	17	14	16	16	17	15	15	15
31	17	16	16	15	15	14	13	16	18	20	15	17	17	12	10
Mean . .	13·8	14·7	14·5	14·7	14·9	14·1	14·1	13·6	14·7	14·8	15·1	15·8	15·5	14·8	14·6

AUGUST.

1	11	13	15	15	16	10	9	7	12	9	8	6	5	6	6
2	6	10	10	8	7	7	5	5	6	6	6	5	7	9	8
3	13	11	12	13	12	10	10	10	12	13	14	13	13	12	10
4	15	16	14	15	15	16	14	13	12	12	14	13	13	13	13
5	14	13	13	14	10	10	12	14	16	14	14	12	13	16	17
6	19	18	19	19	20	19	19	18	15	13	14	9	13	15	16
7	10	12	20	19	19	16	15	15	14	15	10	9	10	8	14
8	13	14	15	14	15	20	24	16	18	16	10	9	18	16	16
9	17	17	17	19	16	16	18	19	14	16	14	12	12	9	12
10	17	18	20	20	20	18	18	17	17	17	20	22	20	15	13
11	18	19	19	19	19	19	20	22	20	22	20	17	17	17	18
12	21	20	22	20	21	21	20	20	20	20	20	18	18	19	19
13	23	22	22	23	22	22	22	20	20	20	19	20	18	18	21
14	20	16	22	19	19	14	18	21	21	15	18	18	18	19	18
15	19	19	18	18	17	17	17	19	19	20	15	16	16	16	15
16	16	16	16	16	17	15	15	17	14	19	18	18	17	19	16
17	22	24	24	26	24	22	20	22	22	22	21	22	17	16	21
18	21	21	17	18	16	17	17	18	21	19	14	15	14	17	16
19	17	18	19	21	18	17	19	19	20	19	11	15	16	15	14
20	15	15	17	15	15	16	17	17	13	15	15	15	16	17	18
21	17	17	18	19	20	20	18	19	22	21	19	16	17	19	17
22	15	16	17	16	17	17	18	18	21	20	20	19	21	21	18
23	16	18	17	17	17	18	23	15	15	18	18	19	18	17	16
24	15	15	15	16	17	16	14	15	17	12	14	14	16	15	16
25	14	15	15	13	13	13	11	11	11	14	12	10	11	13	12
26	11	10	10	12	10	12	12	11	12	11	6	9	10	9	9
27	11	11	11	11	11	11	11	11	12	13	12	13	14	13	13
28	11	12	13	13	14	14	16	15	14	16	17	16	16	16	16
29	15	17	18	18	18	19	17	20	18	20	18	20	20	17	19
30	18	18	16	16	16	14	15	17	18	18	20	21	18	17	19
31	18	18	18	20	21	21	19	18	20	21	22	21	22	22	21
Mean . .	15·7	16·1	16·7	16·8	16·5	16·0	16·2	16·1	16·3	16·3	15·3	14·9	15·3	15·2	15·4

JULY.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)
(IN MILES PER HOUR.)

Hours.									Mean.	Mean by R. Beckley's anemo-graph.	Maximum.			Minimum.			Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.		Mag.	Time.		Mag.	
											H.	M.		H.	M.		
18	20	11	13	14	12	10	12	10	14·6	9·7	19	28	35	9	6	2	1
22	19	21	24	22	19	20	19	21	**21·5**	**12·9**	9	20	**49**	0	40	4	2
18	18	18	19	16	19	19	18	20	19·5	11·3	12	26	49	19	55	5	3
16	15	15	15	14	14	13	13	7	17·4	10·4	21	45	38	23	30	4	4
10	5	5	10	17	15	14	20	9	11·6	8·1	0	20	48	16	15	2	5
10	13	12	12	13	11	12	10	13	12·1	8·5	2	25	22	14	45	2	6
10	10	13	8	9	11	11	11	13	**8·9**	**4·8**	14	15	24	1	20	2	7
9	14	13	13	13	11	12	12	13	12·9	7·1	14	35	32	9	40	4	8
23	20	20	19	18	18	18	15	15	16·3	9·9	14	45	44	0	20	4	9
19	18	19	18	17	17	16	17	16	17·0	10·2	13	45	36	3	40	5	10
15	17	18	18	15	16	17	17	18	16·6	9·0	9	30	46	19	45	7	11
17	16	13	17	14	13	10	17	15	15·5	9·9	14	45	42	8	35	6	12
15	16	18	21	21	20	17	18	16	16·2	10·5	11	45	40	13	45	3	13
14	18	15	14	12	16	15	12	20	15·5	9·3	23	35	39	19	0	5	14
14	4	20	18	15	7	8	8	9	11·2	7·0	17	30	30	16	30	2	15
10	16	10	16	14	12	12	11	14	11·0	5·9	16	45	35	2	25	4	16
15	13	13	13	10	10	12	12	10	12·9	7·0	10	32	34	12	30	6	17
17	17	16	15	13	14	13	15	16	13·7	7·5	15	15	36	9	6	5	18
14	13	18	14	14	13	12	14	14	14·6	8·2	3	50	35	14	30	5	19
16	15	15	15	14	14	13	11	14	14·0	7·5	14	45	34	5	40	4	20
15	16	14	14	12	14	14	14	15	15·2	8·8	5	28	36	12	58	6	21
15	14	13	16	13	13	12	15	10	14·3	8·5	12	30	30	23	45	5	22
12	12	13	12	12	10	10	10	12	12·4	7·4	1	5	33	16	15	5	23
17	16	15	14	16	15	16	15	18	15·0	10·0	1	4	33	8	40	4	24
16	16	9	12	6	7	6	8	10	14·6	10·0	11	45	34	14	45	4	25
19	16	13	13	10	10	9	14	10	13·5	8·3	15	40	24	9	30	4	26
19	21	21	24	19	17	14	13	14	15·3	10·4	18	50	28	1	25	5	27
11	10	10	11	12	12	14	15	16	11·8	6·6	23	30	29	12	20	4	28
15	17	20	17	13	12	12	15	15	15·5	9·3	14	15	36	14	40	6	29
14	14	15	14	13	13	16	15	18	14·8	8·4	7	45	41	23	25	7	30
11	11	12	13	16	13	13	13	13	14·4	8.3	11	48	34	15	35	6	31
15·0	14·8	14·8	15·2	14·1	13·5	**13·2**	13·8	14·0	14·5	8·7							Mean.

AUGUST.

5	6	9	11	7	7	9	8	7	9·0	5·3	18	2	17	11	55	3	1
11	12	12	13	12	13	12	11	12	**8·9**	**4·5**	19	15	21	8	45	**2**	2
10	14	14	15	14	14	12	14	14	12·5	6·8	22	20	26	6	48	5	3
11	14	13	12	9	11	12	14	13	13·2	7·0	16	50	36	9	20	4	4
16	14	16	18	12	12	9	13	15	13·6	7·6	17	15	36	4	45	4	5
18	17	13	13	12	9	12	10	9	15·0	7·9	3	40	36	11	20	4	6
16	16	20	16	15	14	19	18	14	14·7	9·7	2	56	35	13	54	4	7
18	17	17	13	17	19	25	20	20	16·7	10·2	15	32	40	1	0	5	8
12	14	16	14	14	13	13	14	16	14·7	7·9	21	25	35	13	25	5	9
16	14	15	15	15	17	17	15	18	17·3	9·5	1	40	36	14	30	7	10
16	20	17	22	22	21	20	20	21	19·4	10·3	18	40	41	14	50	9	11
19	20	18	21	20	22	22	22	23	20·3	10·7	19	25	40	9	10	10	12
21	19	20	22	22	22	21	20	18	**20·7**	11·5	22	57	**44**	1	57	11	13
17	18	19	**21**	20	20	18	19	19	18·8	11·1	23	10	39	9	10	9	14
16	16	17	16	17	18	17	16	14	17·0	9·3	20	5	30	22	58	8	15
18	17	15	11	15	16	19	20	20	16·7	9·4	7	55	37	18	25	7	16
22	22	20	18	17	18	17	17	19	20·6	11·9	19	15	42	23	15	9	17
14	16	14	13	14	15	17	16	18	16·6	9·3	16	30	37	17	25	7	18
16	12	14	13	14	12	14	12	13	15·7	8·7	17	15	33	17	30	8	19
19	17	16	13	14	15	14	15	17	15·7	8·7	5	40	36	9	5	7	20
17	17	16	17	15	15	14	14	14	17·4	9·7	8	40	38	22	35	9	21
18	19	13	16	14	16	15	13	15	17·2	9·7	12	42	37	3	55	9	22
16	17	14	13	13	12	13	12	13	16·0	10·0	6	28	37	20	56	9	23
17	15	14	15	14	16	17	16	15	15·3	8·5	23	20	36	9	58	6	24
11	12	13	17	17	15	11	11	11	12·7	7·0	19	58	32	12	20	6	25
12	12	11	10	13	12	7	9	12	10·1	5·6	16	50	25	10	50	4	26
14	17	13	13	14	12	13	12	13	12·5	6·8	9	20	34	1	45	7	27
15	12	15	18	15	15	13	16	16	14·7	8·7	15	20	34	8	5	9	28
21	20	19	20	20	19	17	17	20	18·6	10·3	5	50	38	0	8	8	29
14	20	18	20	22	18	16	18	17	17·7	10·8	16	20	38	8	45	10	30
21	19	18	19	18	16	15	14	15	19·0	**12·6**	13	15	30	22	40	11	31
15·7	**16·0**	**15·5**	**15·7**	**15·4**	**15·3**	**15·2**	**15·0**	**15·5**	**15·8**	**8·9**							Mean.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER. (IN MILES PER HOUR.)

Date.	Hours.														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	13	18	20	22	13	15	19	19	21	19	17	17	19	21	19
2	18	19	19	19	19	21	21	20	19	16	17	17	18	18	18
3	15	16	15	15	15	15	15	16	19	14	15	15	16	17	16
4	15	12	14	19	16	14	16	18	14	12	14	10	16	17	17
5	16	17	17	17	15	18	15	14	14	15	12	12	14	16	16
6	13	13	14	15	15	14	15	14	14	13	13	12	13	14	14
7	7	5	9	8	9	7	8	5	4	4	9	11	11	12	12
8	6	7	6	8	8	9	7	6	3	6	9	11	11	11	10
9	9	7	7	7	8	7	7	8	7	5	7	9	10	10	11
10	5	5	4	4	6	9	9	9	7	8	4	9	10	11	12
11	5	4	4	5	5	8	9	9	8	7	4	6	10	12	13
12	6	5	7	8	7	7	7	5	5	4	5	9	11	13	14
13	7	7	6	6	5	4	4	5	6	8	8	9	11	11	11
14	5	6	4	8	7	6	9	8	6	5	4	8	10	11	13
15	5	3	4	6	4	4	9	6	7	5	8	10	9	11	11
16	3	8	6	6	9	8	8	6	7	7	5	6	9	10	11
17	5	6	4	6	5	7	9	7	7	8	11	13	13	13	14
18	8	9	6	5	15	5	7	9	8	7	9	9	10	10	12
19	3	5	7	7	8	9	7	7	9	9	3	7	14	15	17
20	17	15	18	17	18	15	12	8	20	26	18	14	12	14	11
21	5	5	7	4	5	4	5	4	11	8	12	15	15	18	19
22	19	22	22	20	20	20	20	20	20	20	21	20	19	20	19
23	16	18	18	18	17	16	16	16	17	17	18	20	21	19	18
24	11	14	14	14	15	16	17	15	15	15	16	17	17	16	16
25	13	15	15	13	12	14	10	12	10	10	10	11	14	15	16
26	12	13	14	14	12	15	14	14	13	13	13	14	15	15	15
27	15	15	14	14	13	9	12	15	10	10	13	14	15	16	17
28	11	12	13	12	12	11	11	11	10	9	12	12	14	14	15
29	10	10	11	11	12	11	11	13	10	12	11	12	13	16	17
30	12	13	13	14	15	17	16	15	14	13	14	13	14	16	16
Mean . .	10·2	10·3	11·1	11·4	11·3	11·2	11·5	11·1	11·2	10·8	11·1	12·1	13·5	14·4	14·7

OCTOBER.

1	7	10	11	11	8	9	12	11	8	7	6	11	13	14	15
2	8	5	6	12	14	15	14	15	17	13	13	15	13	16	15
3	5	6	5	5	5	5	7	9	6	8	9	9	7	10	11
4	7	5	6	11	11	11	11	11	10	12	12	12	12	13	10
5	6	6	6	6	9	9	10	8	8	6	7	7	9	10	10
6	7	4	4	6	6	13	6	8	8	10	11	9	12	13	13
7	10	6	10	12	10	9	10	9	6	11	7	10	10	10	12
8	10	10	14	13	11	11	12	12	14	13	13	13	12	11	11
9	9	9	9	11	13	12	12	13	13	11	11	10	12	12	12
10	13	13	12	14	19	22	23	25	24	25	22	23	22	21	19
11	22	22	23	20	19	24	20	15	16	23	23	24	25	24	24
12	27	15	19	18	19	18	19	22	23	23	25	23	21	13	6
13	21	21	19	19	20	23	22	22	24	25	30	29	24	19	15
14	15	15	16	17	13	14	14	13	11	14	15	16	16	17	20
15	15	14	15	15	15	17	16	14	15	16	17	15	18	15	15
16	16	15	13	13	13	10	13	13	9	15	13	11	10	14	19
17	17	16	17	14	15	16	14	15	13	14	14	15	16	17	14
18	13	10	9	8	8	9	10	10	9	6	7	8	8	10	10
19	5	5	6	7	6	6	6	6	7	8	8	10	12	12	14
20	5	5	3	4	5	5	5	5	6	5	4	6	7	10	11
21	4	4	7	9	8	5	3	4	4	5	5	3	8	9	10
22	4	5	7	5	7	8	9	10	10	10	10	10	7	7	9
23	7	8	6	7	6	6	8	8	9	8	5	4	5	5	7
24	6	6	8	9	10	9	9	10	8	8	6	5	6	6	8
25	4	3	4	7	9	7	6	7	7	7	5	6	8	7	8
26	5	6	9	9	12	11	11	11	10	9	8	7	7	6	7
27	7	8	10	10	11	11	13	12	14	9	7	9	10	8	7
28	5	6	9	12	12	12	12	13	12	12	11	10	9	9	8
29	7	7	13	12	9	8	8	9	7	7	6	8	8	8	13
30	6	7	7	7	9	10	10	7	7	8	6	6	4	8	11
31	5	5	6	7	6	7	4	5	8	5	3	8	10	12	14
Mean . .	9·6	8·9	10·0	10·6	10·9	11·4	11·3	11·4	11·1	11·4	10·9	11·4	11·6	11·8	12·2

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER. (IN MILES PER HOUR.)

Hours.									Mean.	Mean by R. Beckley's Anemograph.	Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
17	17	16	16	16	16	16	14	14	17·3	10·7	9 40	36	23 15	9	1
19	19	19	19	18	17	17	16	16	18.3	11·5	12 55	33	21 25	10	2
17	16	15	15	15	14	12	14	13	15·2	9·1	10 30	30	9 45	8	3
17	18	15	17	16	16	16	17	17	15·5	8.9	7 40	30	9 18	6	4
16	14	12	13	12	12	13	13	12	14·4	8·5	5 20	28	20 58	8	5
13	15	13	12	11	9	8	10	9	12·7	8·1	3 40	25	20 20	7	6
10	10	10	9	9	8	7	7	6	8·2	4·8	15 7	18	9 10	3	7
12	11	10	10	9	10	10	11	10	8·8	5·5	15 20	16	8 35	2	8
11	11	11	11	11	10	9	8	7	8·7	4·9	18 58	18	9 55	3	9
12	12	11	11	10	9	7	7	6	8·2	5·0	13 55	20	10 50	4	10
13	12	12	10	10	10	9	8	6	8·3	4·9	14 50	20	10 55	4	11
14	13	12	10	9	9	9	8	7	8·5	4·6	15 45	20	9 40	4	12
11	11	9	9	8	8	7	6	4	7·5	4·0	15 55	18	6 48	2	13
12	13	12	10	10	8	7	6	5	8·0	4.4	14 58	18	10 47	3	14
12	14	10	9	6	7	6	5	4	7·2	3·7	14 20	16	5 15	4	15
11	12	10	9	9	9	7	6	5	7·8	4·3	16 57	19	2 0	4	16
14	15	15	14	12	11	11	9	8	9·9	6·3	14 15	22	8 10	4	17
8	7	6	6	7	7	4	4	3	7·5	4·2	4 2	41	22 35	3	18
17	14	13	10	11	12	13	14	18	10·4	6·6	14 30	23	10 25	3	19
13	15	16	14	12	13	9	8	9	14·3	10·2	11 15	24	7 46	6	20
17	17	17	20	23	23	22	22	21	13·3	8·3	18 35	32	4 5	4	21
20	20	19	19	19	17	15	15	17	19·3	13·7	4 25	36	4 50	11	22
18	15	17	17	14	14	13	12	13	16·6	11·1	10 32	28	9 35	10	23
16	16	15	14	12	12	12	11	12	14·5	9·7	6 20	22	23 15	8	24
17	15	13	13	13	13	12	12	12	12·9	8·1	14 8	22	6 30	7	25
15	16	16	16	15	13	13	13	14	14·0	9·6	16 18	26	7 2	8	26
16	16	14	15	14	13	12	12	12	13·6	8·9	6 55	27	6 5	7	27
13	13	12	11	11	9	9	9	11	11·5	6·6	14 30	19	9 45	6	28
17	15	14	12	10	9	11	9	12	12·0	7·8	15 25	22	8 45	7	29
15	16	13	10	9	9	5	9	10	13·0	8·3	13 20	24	21 55	4	30
14·4	14·2	13·2	12·7	12·0	11·6	10·7	10·5	10·4	11·9	7·4					Mean.

OCTOBER.

13	13	12	12	11	9	7	10	13	10·5	6·2	23 50	34	0 15	4	1
14	12	12	11	10	8	6	5	5	11·4	6·5	8 5	26	2 15	5	2
13	13	11	10	7	7	7	8	10	8·0	3·7	15 25	17	5 35	5	3
9	8	10	14	14	14	14	6	6	10·4	6·1	21 15	34	2 0	5	4
8	10	12	14	14	13	14	13	14	9·5	5·1	22 12	26	3 15	5	5
13	11	12	10	9	8	10	12	10	9·4	4·5	5 45	30	22 45	4	6
12	12	9	9	10	9	8	9	9	9·5	4·6	6 20	21	10 55	4	7
12	11	10	9	9	8	7	7	10	11·0	5·3	8 15	21	22 10	5	8
12	11	11	10	11	13	14	11	12	11·4	5·4	21 20	20	11 30	6	9
14	14	15	14	15	16	17	19	22	18·5	13·3	7 30	34	2 0	7	10
24	26	22	20	28	25	29	28	29	23·1	16·5	21 40	41	6 30	10	11
13	20	22	22	22	22	24	23	20	20·0	14·6	22 30	37	14 30	4	12
18	17	15	19	18	15	12	15	13	19·8	13·6	11 10	42	21 15	9	13
17	17	17	12	14	15	14	15	13	15·0	7·2	13 35	32	8 20	8	14
13	10	13	11	10	10	12	12	12	14·0	6·7	1 15	28	18 30	8	15
10	10	13	16	18	14	13	13	16	13·3	7·1	14 30	28	12 20	5	16
14	10	8	15	14	14	15	12	15	14·3	8·7	18 40	25	18 10	5	17
11	10	9	8	6	5	5	5	5	8·3	3·6	0 20	16	22 5	4	18
15	15	14	13	12	10	9	6	6	9·1	5·2	15 32	21	7 50	4	19
13	12	12	13	13	12	10	7	5	7·6	4·8	15 45	17	2 15	3	20
11	11	13	12	11	9	7	6	5	7·2	4·9	18 0	18	6 50	2	21
11	11	12	13	12	10	8	6	9	8·7	5·6	18 15	17	0 30	4	22
10	9	10	12	10	10	9	9	5	7·6	4·8	18 35	15	11 20	2	23
9	9	11	10	11	12	10	7	4	8·2	5·6	19 48	16	8 50	4	24
8	9	11	11	10	11	9	6	6	7·3	4·6	20 5	16	1 30	3	25
10	11	10	10	12	12	10	8	7	9·1	5·9	19 40	17	0 25	4	26
6	5	12	14	13	12	10	9	5	9.7	6·3	17 55	18	11 45	5	27
7	8	9	10	10	12	8	6	7	9·5	6·3	8 30	18	0 30	4	28
15	15	13	13	13	10	9	7	7	9·7	6·2	15 30	20	6 35	4	29
10	12	13	13	12	13	10	7	7	8·7	5·8	16 40	18	12 45	3	30
15	14	15	14	14	11	9	6	7	8·7	6·1	15 45	20	7 2	0	31
12·3	12·1	12·5	12·7	12·7	11·9	11·2	10·1	10·1	11·3	6·8					Mean.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER. (IN MILES PER HOUR.)

Date.	Hours.														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	7	7	6	6	7	10	9	11	13	13	11	9	10	8	13
2	7	10	11	12	14	15	20	27	23	19	18	8	8	7	8
3	11	9	9	9	10	5	9	9	9	5	4	6	8	8	9
4	3	4	4	5	5	6	6	1	5	5	4	6	11	12	15
5	5	6	8	8	9	6	4	5	4	5	4	6	9	11	11
6	7	8	9	10	11	12	12	12	11	11	12	10	7	8	10
7	7	8	10	10	11	12	13	11	14	13	11	9	7	6	7
8	5	5	8	11	13	13	14	15	15	12	12	10	7	6	7
9	5	9	12	13	13	13	14	15	14	14	12	13	14	11	11
10	9	7	5	6	5	8	7	7	8	8	5	5	5	6	8
11	6	6	7	7	6	6	8	9	10	7	4	3	5	7	9
12	5	5	6	7	8	5	8	8	5	5	10	9	9	9	11
13	4	5	5	4	3	5	6	8	8	8	4	5	5	7	8
14	6	9	11	11	10	10	9	9	9	8	6	5	6	6	6
15	5	4	3	2	3	8	10	10	9	5	3	4	3	6	10
16	5	3	4	5	6	7	9	9	9	8	6	4	5	6	8
17	6	4	5	6	7	8	9	9	7	8	6	8	7	7	7
18	5	5	7	9	11	10	7	9	8	6	6	5	5	6	6
19	6	8	8	10	11	11	12	13	14	9	7	4	6	7	10
20	6	8	10	12	12	12	13	13	10	9	6	5	5	10	10
21	5	7	9	11	11	11	10	10	9	7	7	7	7	8	9
22	7	11	12	12	14	11	11	13	11	10	9	7	8	8	8
23	5	7	8	11	15	15	15	14	14	13	10	10	7	6	6
24	8	10	9	9	9	10	11	11	13	11	9	10	9	8	6
25	3	5	5	7	6	8	8	10	9	9	7	7	6	5	6
26	5	6	7	8	9	11	10	8	7	7	5	6	6	8	10
27	4	4	4	5	6	8	11	9	10	9	7	9	8	7	7
28	8	10	11	12	13	13	15	15	15	16	16	18	13	9	8
29	8	8	10	12	12	13	18	20	18	19	18	14	11	10	8
30	3	6	7	9	3	12	12	14	13	13	11	10	8	9	10
Mean . .	5·9	6·8	7·7	8·6	9·3	9·8	10·7	11·1	10·8	9·7	8·3	7·7	7·5	7·7	8·7

DECEMBER.

1	5	5	8	12	14	14	14	15	15	12	10	7	7	5	5
2	4	4	5	7	8	10	12	13	14	13	12	10	10	8	8
3	5	7	7	9	14	12	14	15	17	14	12	11	8	6	8
4	8	9	10	11	14	15	16	17	17	17	16	14	10	8	9
5	8	12	14	15	16	16	16	16	19	16	16	14	12	9	8
6	9	14	16	11	12	13	13	14	18	18	15	15	11	8	7
7	7	7	6	8	9	10	13	15	14	15	13	13	11	10	6
8	4	6	10	13	13	16	14	13	12	13	10	8	5	5	6
9	6	6	8	8	7	6	8	8	10	10	9	7	6	9	10
10	5	6	7	7	7	7	7	7	5	5	7	7	5	7	10
11	5	6	6	9	7	9	6	7	8	10	12	12	9	8	7
12	7	7	11	12	14	13	12	12	13	13	20	24	28	19	17
13	15	14	19	18	15	10	10	11	11	9	11	13	11	13	11
14	9	10	9	8	9	8	11	12	14	13	12	11	9	8	11
15	6	8	6	8	8	7	9	7	11	8	6	6	9	11	11
16	5	5	7	7	8	7	6	6	5	7	5	8	12	12	15
17	5	5	5	7	5	5	6	5	7	6	5	4	5	7	9
18	3	3	6	6	5	5	6	8	9	6	4	4	7	9	12
19	7	7	7	8	6	5	4	6	7	8	5	5	5	6	7
20	6	5	6	7	7	8	9	11	14	21	22	20	15	9	5
21	6	7	8	8	11	11	11	7	6	8	6	6	6	10	12
22	7	9	8	9	11	11	11	11	11	11	11	9	5	6	9
23	6	5	5	6	6	7	7	7	9	9	5	4	4	6	9
24	7	5	5	8	10	13	13	14	13	10	4	3	3	5	8
25	6	7	10	12	12	10	13	11	10	8	10	9	9	7	8
26	11	11	9	12	12	15	16	18	17	16	18	14	10	8	8
27	7	8	8	9	8	9	9	8	8	9	8	8	8	8	13
28	5	4	5	7	6	6	9	8	8	8	7	7	6	6	9
29	7	6	5	4	5	5	6	7	7	7	7	7	5	6	7
30	5	4	4	6	6	5	7	6	7	7	6	6	5	10	11
31	7	6	5	3	3	6	5	5	6	6	5	7	9	11	11
Mean . .	6·5	7·0	7·9	8·9	9·3	9·5	10·1	10·3	11·0	10·7	10·0	9·5	8·5	8·4	9·3

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER. (IN MILES PER HOUR.)

Hours.									Mean.	Mean by R. Beckley's anemograph.	Maximum.			Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			Time.		Mag.	Time.	Mag.	
											H.	M.		H.	M.	
15	14	14	13	10	12	5	2	2	9·5	6·4	20	45	**34**	23	0	2	1
7	10	10	8	10	8	8	9	9	**11·9**	**9·1**	**6**	**50**	34	12	40	3	2
8	8	6	4	3	3	1	1	1	6·5	4·1	3	55	13	22	5	1	3
14	15	14	13	11	12	11	9	7	8·3	5·5	15	12	21	7	20	**0**	4
12	13	14	12	11	12	9	5	6	8·1	5·2	17	32	20	8	30	2	5
13	13	12	11	11	9	8	6	6	10·0	6·1	16	45	17	23	15	4	6
8	9	9	10	9	10	9	8	6	9·5	6·0	8	35	17	23	30	5	7
9	11	11	14	13	11	11	6	4	10·1	6·7	18	52	18	22	30	3	8
10	10	8	7	7	4	3	4	6	10·1	6·6	3	15	17	20	30	3	9
9	8	9	9	9	11	8	5	5	7·2	4·4	19	45	13	11	0	4	10
7	7	5	4	6	4	4	3	2	**5·9**	**3·2**	6	50	14	11	25	3	11
11	10	7	6	8	6	6	5	5	7·3	4·9	15	10	16	9	40	2	12
8	8	7	10	10	10	10	9	6	6·8	4·4	19	45	14	0	15	2	13
8	8	9	10	9	7	6	5	5	7·8	5·1	18	45	12	14	20	3	14
10	10	10	11	12	12	10	8	5	7·2	4·9	16	10	15	2	30	2	15
9	9	9	10	12	10	10	8	9	7·5	5·0	19	40	14	0	0	3	16
9	10	13	13	12	12	10	9	6	8·3	5·5	17	40	17	1	50	3	17
9	10	11	12	13	12	12	6	5	8·1	5·1	21	20	16	0	25	4	18
10	10	10	11	11	10	9	8	6	9·2	6·3	8	20	18	11	20	4	19
12	14	13	14	10	7	6	7	6	9·6	6·6	16	40	19	21	5	4	20
9	12	13	13	9	7	7	6	5	8·7	5·9	17	58	18	20	30	4	21
8	11	12	12	10	11	11	9	5	10·0	6·8	17	57	16	23	45	4	22
8	7	7	8	9	9	9	8	8	9·5	6·3	4	45	18	14	35	5	23
10	11	10	9	9	9	7	5	4	9·0	6·0	8	15	16	23	0	4	24
8	9	10	12	12	10	8	5	5	7·5	4·8	18	55	16	0	30	3	25
10	10	11	12	12	13	7	5	4	8·2	5·3	20	35	19	1	0	4	26
11	10	10	12	12	12	10	4	7	8·2	5·2	18	45	18	0	20	3	27
7	7	**9**	11	13	13	11	6	8	11·5	7·9	8	50	20	22	40	4	28
9	10	9	11	**13**	**13**	10	6	4	**11·8**	**8·3**	7	47	23	23	55	3	29
10	11	12	12	11	12	9	6	5	9·7	6·3	**7**	**50**	18	0	10	2	30
9·6	10·2	10·1	10·5	10·2	9·7	8·2	6·1	**5·4**	8·8	5·8							Mean.

DECEMBER.

7	8	10	13	13	11	11	7	4	9·7	6·2	19	2	18	1	0	4	1
8	10	10	11	12	12	10	9	7	9·5	6·2	18	20	18	0	20	3	2
10	12	12	12	11	11	9	6	6	10·3	6·5	8	15	21	1	0	4	3
8	5	12	14	14	14	12	7	6	11·8	8·0	6	20	22	0	45	4	4
8	9	9	9	11	12	10	5	8	12·0	8·4	7	10	20	22	25	5	5
7	9	8	10	11	10	9	8	7	11·4	7·8	8	20	20	13	10	6	6
7	9	8	9	11	11	9	7	4	9·7	6·2	6	45	18	23	15	4	7
8	9	9	8	8	7	7	5	6	9·0	5·9	5	25	18	1	30	3	8
13	16	17	15	13	12	9	8	6	9·5	6·2	17	15	22	5	30	5	9
12	10	11	10	10	5	5	7	5	7·3	**4·3**	14	57	15	12	32	4	10
7	7	9	9	8	5	6	7	7	7·7	4·5	10	58	18	0	40	4	11
18	23	22	18	17	14	9	8	12	**15·1**	**11·7**	12	28	**42**	1	40	5	12
11	13	12	10	9	8	8	9	10	11·7	7·9	3	0	24	9	18	5	13
8	8	9	8	9	9	9	7	6	9·5	6·4	7	50	18	23	30	5	14
9	7	7	7	8	8	6	5	5	7·6	4·7	14	15	15	1	50	4	15
15	14	14	13	13	11	10	7	6	9·1	6·3	16	15	21	8	15	3	16
10	11	11	11	11	10	7	5	5	7·0	4·5	19	20	15	7	30	3	17
14	15	15	12	13	13	12	7	8	8·4	5·4	16	15	18	10	50	**0**	18
8	9	9	10	9	7	7	5	5	**6·7**	4·3	18	55	14	7	50	3	19
8	10	9	10	10	10	9	7	6	10·2	7·2	9	58	28	4	20	3	20
13	14	14	13	11	8	7	6	6	9·0	6·0	16	52	19	7	48	2	21
12	10	10	12	12	12	11	7	6	9·6	7·0	19	32	17	13	0	4	22
11	10	7	9	7	8	7	8	7	7·6	4·5	15	45	14	11	30	3	23
10	11	11	11	12	11	11	6	4	8·7	5·9	6	30	17	10	17	3	24
8	15	14	14	13	11	9	9	10	10·2	7·0	16	15	21	9	10	4	25
11	12	12	9	11	11	11	8	7	12·0	7·7	7	20	21	14	30	5	26
11	11	12	14	12	12	11	9	7	9·5	6·0	18	10	18	8	25	4	27
11	12	14	13	12	12	11	8	7	8·4	5·5	17	45	18	0	45	4	28
8	10	13	13	12	13	13	9	5	7·8	5·4	21	25	19	3	30	3	29
12	12	1	13	15	13	11	7	7	8·2	5·5	19	15	18	1	25	4	30
11	11	12	12	11	8	5	5	4	7·3	4·7	15	28	16	3	5	3	31
10·1	11·0	**11·4**	11·4	11·3	10·3	9·1	7·0	**6·4**	9·4	6·3							Mean.

JANUARY. (Averages for periods of sixty minutes from full hour to full hour of local mean time.)

Date.	Hours.											
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12
1	NE	ENE	E	E	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NE
2	N	ESE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE
3	N	ENE	NE	ENE	E	ENE	NE	ENE	ENE	ENE	ENE	ENE
4	SE	SE	ESE	ENE	ENE	ENE	ENE	E	ESE	E	E	E
5	ENE	ENE	ENE	ENE	E	E	E	ENE	ENE	ENE	SE	SE
6	NE	ENE	E	ENE	ENE	ENE	ENE	E	ENE	E	ENE	ENE
7	E	E	ESE	ESE	ESE	ENE	E	ESE	ESE	ENE	ESE	SE
8	NNE	NNE	NE	NE	ENE	NE	NE	NNE	NNE	NNE	N	E
9	N	N	NNE	NNE	NNE	NE	NE	NE	NNE	N	N	ESE
10	N	NNE	NNE	N	N	NNE	NNE	NNE	NE	ENE	NNW	NNW
11	N	NNE	N	N	NNE	NE	NE	NNE	N	NE	N	N
12	NNE	N	NNE	NE	NE	NE	NE	NE	ENE	ENE	ENE	E
13	NNE	NNE	NE	NE	NE	NE	NE	NE	ENE	ENE	ESE	ESE
14	NNE	NNE	NNE	NE	NE	NE	NE	E	ENE	E	SE	ESE
15	ENE	ENE	ENE	NE	NE	NE	NE	E	ENE	ENE	ENE	ENE
16	ENE	NE	ENE	NE	NNE	NNE	NE	ENE	ENE	ENE	ENE	ENE
17	NE	E	ENE	E	ENE	ENE	NE	ENE	ENE	ENE	E	ESE
18	E	NE	ENE	NE	N	NE	NNE	NE	ENE	ENE	ENE	E
19	N	N	NNE	NNE	NNE	NE	NE	NE	ENE	ENE	E	ENE
20	ESE	ENE	E	NE	NE	NE	NNE	NNE	NE	ENE	WNW	NW
21	ESE	E	ENE	NE	NE	NE	NE	NNE	N	NNE	E	NNW
22	ENE	E	ENE	NE	ENE	ENE	ENE	ENE	NE	NNE	E	S
23	N	N	N	N	NE	NE	NNE	NNE	N	N	NNW	NNW
24	ESE	ESE	ESE	ENE	ESE	E	E	E	E	E	SE	ESE
25	NE	ENE	ENE	ENE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE
26	NNE	NNE	NE	NNE	NNE	NNE	NNE	NNE	NNE	NNW	NNW	NNW
27	NNE	NNE	NNE	NE	NNE	NE	NE	ENE	E	ENE	ENE	WNW
28	ESE	ENE	ENE	NE	NNE	NNE	NNE	ENE	E	ESE	NW	NNW
29	N	N	N	N	NE	NE	E	ENE	NE	N	N	NNW
30	NNW	N	NNE	N	N	N	NNE	NE	ENE	ENE	E	NW
31	N	N	NNE	NNE	N	NNE	NNE	ENE	NE	ENE	NNW	NNW
Mean.	NE	NE	NE	NE	NE	NE	NE	ENE	ENE	ENE	NE	NNE

FEBRUARY.

1	N	NNE	NNE	NE	NE	NE	NE	NE	ENE	ENE	ENE	S
2	ENE	E	ESE	ESE	NE	E	NE	NE	N	N	NW	NW
3	N	N	N	NNE	NNE	NNE	NE	NE	N	N	NNW	NNW
4	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NNE	ENE	NE	NNW
5	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NE	NE	NE	ENE	ENE
6	N	N	N	NNE	NE	ENE	ENE	NE	ESE	ENE	SE	SSW
7	ESE	SE	SE	SE	SSE	S	ESE	ESE	ESE	SSE	SSW	SW
8	NE	ESE	SE	SE	SE	ESE	N	ENE	E	ENE	N	N
9	N	NNE	NE	NE	NE	NNE	NNE	NE	NE	E	E	NNW
10	NE	NNE	NNE	NNE	NNE	NE	ENE	NE	NE	NE	NNW	NNW
11	NE	N	N	N	NNE	NE	NNE	NNE	NE	ENE	NNW	NNW
12	N	N	N	N	NNE	NNE	NNE	NNE	NE	NNE	N	NNW
13	N	NNE	NNE	N	N	ENE	ESE	NE	NE	ESE	NW	NNW
14	N	N	N	N	NNE	NNE	NNE	NE	ENE	ENE	NNW	NNW
15	NE	NNE	NE	N	N	NNE	ENE	NNE	NNE	NW	NNW	NNW
16	N	N	NNE	NE	NE	NNE	N	N	N	E	SE	E
17	N	N	N	NNE	N	NNE	NE	NNE	NNE	ENE	E	NW
18	N	NE	NE	NE	NE	NNE	NNE	NNE	NNE	ENE	NE	NNW
19	N	NNE	N	NNW	N	NNE	NNE	NNE	NNE	N	NNW	NNW
20	N	E	ENE	NE	NNE	NNE	NE	NE	ENE	E	ESE	SE
21	NE	NE	NNE	NNE	NNE	NNE	NE	ESE	SE	SE	SE	SSW
22	NNE	NNE	NE	NE	NE	NE	NNE	NNE	ENE	NNW	NNW	NNW
23	NE	NNE	NE	NNE	NE	NE	NE	ENE	ENE	NE	N	NNW
24	N	NNE	NNE	NNE	NNE	NE	NE	NE	NE	NE	NNW	NNW
25	N	N	N	NNE	NNE	NE	NE	NE	ENE	NW	NW	NW
26	N	N	NE	NNE	NNE	NNE	NNE	NNE	NNE	NE	E	ESE
27	N	N	N	N	NNE	NNE	NNE	NNE	NE	ENE	E	NNW
28	N	N	N	N	N	N	N	NE	NE	NNW	NNW	WNW
Mean.	NNE	NNE	NNE	NNE	NNE	NNE	NE	NE	NE	NE	N	NNW

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JANUARY.

Hours.												Mean.	Date.
12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24		
ENE	E	NW	NNW	NNW	NNW	N	NNW	NNW	N	N	N	NE	1
ENE	WNW	NW	NW	NW	NNW	NNW	N	N	N	NNE	N	NNE	2
SE	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNE	NE	ENE	NNE	3
E	NW	NW	NNW	NNW	NNW	NNW	N	N	N	N	NE	NNE	4
SE	SE	SSW	WNW	NNW	NNW	NNW	NNW	NNW	NNE	NE	NE	ENE	5
E	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	N	ENE	E	NE	6
WSW	NW	NW	NW	NNW	NNW	NNW	N	N	N	N	N	NNE	7
NW	NW	NW	NW	NW	NNW	NNW	NNW	N	N	N	N	N	8
NNW	NNW	NNW	NNW	N	N	N	N	N	N	NNE	NNE	N	9
NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	N	N	N	10
NNW	NNW	NNW	NNW	NNW	NNW	N	N	NNE	N	NNE	NNE	N	11
NW	NW	NW	NNW	NNW	NNW	N	N	N	N	NNE	N	N	12
NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	N	NNE	N	N	13
ESE	WNW	WNW	WNW	NW	NW	NNW	NNW	NNE	NE	E	ENE	NNE	14
SE	NW	NW	NW	NW	NNW	NNW	N	N	N	NNE	NNE	NNE	15
NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNE	NE	ESE	NE	NNE	16
SW	W	WNW	WNW	NW	NW	NNW	NNW	NNE	NE	E	ESE	NNE	17
NW	NW	NNW	NNW	NNW	NNW	N	N	NE	NNE	NNE	N	N	18
NW	NW	NW	NNW	NNW	NNW	N	N	NNE	NNE	NE	ENE	N	19
NW	NW	NW	NW	NNW	NNW	N	N	N	N	NNE	NE	NNE	20
NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NNE	NE	ENE	N	21
NW	NW	NNW	NNW	NNW	NNW	NNW	N	N	NE	NNE	NNE	N	22
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	NE	NE	N	23
NW	NW	NW	NW	NW	NW	NNW	NNW	N	N	N	NNE	NE	24
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNE	NNE	NNE	NNE	25
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	26
NW	NW	NW	NW	NNW	NNW	NNW	N	NNE	ENE	ENE	ESE	N	27
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	28
NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NE	NNE	NNW	N	29
NW	NW	NW	NNW	NNW	NNW	NNW	NNW	N	NNE	NNE	NNE	N	30
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNE	N	N	N	31
NNW	NW	NW	NNW	NNW	NNW	NNW	NNW	N	NNE	NNE	NNE	N	Mean.

FEBRUARY.

NW	NW	NW	NNW	NNW	NNW	NNW	NNW	N	NNE	NE	ENE	N	1
NW	NW	NW	NNW	NNW	NNW	N	N	N	N	NNE	NNW	N	2
NNW	NNW	NW	NNW	N	N	N	N	N	N	N	N	N	3
NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	NNE	ENE	N	4
NE	NW	NW	NNW	N	N	N	NNW	N	N	N	N	N	5
W	W	W NW	NW	NW	NW	NW	NNW	NNW	NE	NE	E	N	6
SW	WSW	W	W	W	WNW	WNW	NW	NNW	NNW	N	NNE	WSW	7
NNW	NW	NW	NNW	NNW	NNW	N	N	N	N	N	N	N	8
NNW	NW	NW	NNW	N	N	N	N	N	N	N	NE	N	9
NNW	NW	NNW	NNW	NNW	N	N	N	N	N	N	NE	N	10
NNW	NNW	NNW	NNW	N	N	N	N	N	NNE	NNE	N	N	11
N	N	N	N	N	N	N	N	N	N	N	N	N	12
NW	NNW	NW	NNW	NW	NW	NNW	NNW	NNW	N	N	NNE	NNW	13
NNW	NNW	NNW	NNW	NNW	N	N	NNW	N	N	N	NNE	N	14
NW	NNW	NNW	NNW	NNW	N	NNW	N	N	NNE	N	N	N	15
NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNW	NNW	N	16
NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	17
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NNE	N	N	18
NW	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	N	NNW	19
W	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNE	N	20
WNW	NW	NW	NW	NW	NW	NNW	NNW	NNW	N	N	NNE	N	21
NNW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	N	NE	NNW	22
NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	23
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	24
NW	NW	NW	NW	NNW	NNW	NNW	N	N	N	N	N	NNW	25
NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	NNE	ENE	N	26
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNE	NNE	NNE	N	27
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NNE	N	28
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NNE	N	Mean.

DIRECTION OF WIND, 1931.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MARCH.

Date.	Hours.											
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12
1	NNE	ENE	N	NNE	NNE	NNE	NE	NE	NNE	NE	NNW	NNW
2	SSE	W	N	N	N	N	ENE	ESE	S	NNW	NW	NW
3	WSW	SSW	SSE	SE	ESE	ESE	E	E	ESE	ESE	NNW	NNW
4	N	NNE	NNE	NNE	NNE	NE	NNE	NNE	NNE	ENE	NNW	NNW
5	NE	N	NNE	NNE	NNE	NNE	NNE	NNE	N	NNE	NNW	NNW
6	NNE	N	NNE	NNE	NNE	NNE	NNE	NE	NNE	N	N	NNW
7	NNW	NNW	NNW	N	NE	ESE	ESE	SE	SE	ESE	ESE	NW
8	SW	SSW	SW	WSW	WSW	S	SSW	SSE	SSE	SSW	SSW	SW
9	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SSW	SW
10	E	SSE	SSE	NW	W	S	ESE	SE	SE	ESE	SE	W
11	E	S	SSE	SSE	SSE	SE	SE	ESE	E	E	E	NW
12	NNW	SSW	SSW	SSW	SE	SE	SE	NNW	E	NNW	NNW	NNW
13	SSW	SW	W	WNW	WNW	SE	SE	SE	SE	ESE	NW	NW
14	NNE	N	N	N	NE	NE	ENE	ENE	E	NNE	NNW	NNW
15	NNE	N	NNE	NNE	NE	NNE	ENE	ENE	E	N	NNW	NNW
16	NNW	NNW	N	NNE	NE	NE	NE	NE	NE	NE	ENE	NNE
17	NNW	NNW	N	N	N	N	N	N	N	N	N	N
18	NNW	N	N	N	N	NNE	NNE	NNE	N	N	N	N
19	N	N	NNE	NNE	NE	NE	NNW	NNW	NNW	NNW	NW	NW
20	WNW	WNW	W	SSE	SE	SE	SSE	SW	SW	WSW	WNW	WNW
21	NW	NW	NNW	N	ENE	ESE	SE	SE	SE	SE	NW	NW
22	N	N	N	NNE	NNE	NE	NE	NE	NE	SE	NW	NW
23	N	NNE	N	N	NNE	NNE	NE	NNE	N	N	NNW	NW
24	N	NNE	NE	NNE	N	N	N	N	N	NNW	NNW	NW
25	SW	SW	WSW	WSW	WSW	W	WNW	WNW	WNW	WNW	WNW	WNW
26	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NW	NNW	NW
27	NW	NNW	NNW	N	NNW	NNE	NE	NNE	NE	E	S	WNW
28	N	N	NNE	NNE	NNE	NE	NNE	NNE	NNW	NNW	NNW	NW
29	NNW	NNW	N	NE	NE	E	SE	SE	SSE	WNW	NW	NW
30	NNW	N	N	N	ENE	NE	E	SE	SE	SSE	NW	NW
31	N	N	NNE	NNE	NNE	NNE	ESE	E	NE	W	NNW	NW
Mean.	NNW	NNW	N	NNE	NNE	NE	ENE	ENE	NE	ENE	NNW	NW

APRIL.

1	WNW	WNW	WNW	NNW	SE	S	SSW	SW	SSW	SW	SW	WSW
2	W	NNW	NNE	NNE	NNE	ENE	ESE	E	ESE	SE	W	W
3	ENE	NE	NNE	NE	NE	NNE	NE	ENE	ESE	ENE	NNW	NNW
4	N	N	N	NNE	NNE	NE	ENE	ENE	ENE	ESE	WNW	NW
5	NNE	NNE	NNE	NE	NNE	N	N	N	N	NNW	NW	NNW
6	N	N	W	W	WSW	SW	SSW	SSW	SSW	SW	W	W
7	NW	NW	W	SSE	SSE	SSE	WSW	SSW	SSW	SW	W	W
8	WSW	W	SW	SSW	SSE	S	S	SSW	SSW	SSW	W	W
9	SW	W	SSW	W	W	WSW	SE	SE	SE	SSE	SW	W
10	NNW	N	N	NE	ENE	ESE	SE	SE	SE	SSE	NW	NW
11	N	N	ESE	SSE	WNW	S E	SSE	SSE	W	WSW	WNW	NW
12	WNW	NNW	N	N	N	NNE	NE	NNE	NNE	NNW	NNW	NNW
13	W	NW	NNW	N	NNE	NE	NE	NE	ENE	ENE	WSW	W
14	E	SE	SW	WSW	SW	W	WNW	SW	W	SW	W	W
15	SW	W	WNW	NW	NNW	NNE	SE	SE	SSE	SW	W	WNW
16	N	NE	NE	NE	NNE	NE	NE	SE	SSE	SW	WSW	W
17	NNW	NNW	NW	WSW	SW	SW	SSW	SSW	SSW	SSW	W	W
18	N	NE	NE	NE	NNE	NE	ENE	SE	S	WSW	NW	NW
19	WSW	SW	SSW	SW	W	WNW	NW	NW	NNW	NW	NNW	NNW
20	N	N	NE	NNE	NNE	NE	NNE	NNE	N	N	NNW	NNW
21	N	N	N	N	NNE	NNE	NNE	N	NNW	NNW	NNW	NW
22	N	N	NE	NE	E	SE	SE	SE	SE	SW	WNW	WNW
23	NNW	NNE	SE	ESE	NE	NE	SE	SW	SW	WSW	WNW	WNW
24	WNW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SW	WSW	W	WNW
25	W	WSW	WSW	WSW	WSW	SW	W	W	W	WNW	NW	NW
26	N	NW	NNW	NNW	NNW	NNW	NNW	NNW	NW	NW	NNW	NNW
27	N	N	NE	NE	NE	NE	NE	N	N	N	NNW	N
28	NNW	NNW	N	N	N	N	N	N	N	NNW	N	NNW
29	WNW	SW	WSW	W	WNW	NW	NNW	NNW	N	NNW	NNW	NNW
30	NNW	SW	SW	SW	WSW	WSW	S	SE	SE	W	NNW	NW
Mean.	NNW	NNW	NNW	NNW	N	NNE	E	ESE	NE	WNW	NW	NW

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MARCH.

Hours.												Mean.	Date.
12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24		
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNE	NNE	NE	N	1
NW	NW	NW	NW	NNW	NNW	NNW	NW	NW	SW	SSW	SSW	NW	2
NNW	NW	NW	NNW	NNW	NNW	NNW	N	N	N	NNE	N	N	3
NNW	NNW	NNW	NNW	NNW	N	N	N	NNE	N	NNE	NE	N	4
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	5
NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	N	NNE	N	N	6
NW	NW	NW	NW	NNW	NNW	N	N	N	S	SSW	SW	NNW	7
SW	SW	WSW	WSW	WSW	SW	SW	SW	SW	SW	SSW	SE	SW	8
WSW	WSW	WSW	W	WNW	WNW	NW	NW	NW	NW	NW	N	S	9
NW	NW	NW	NNW	NNW	NNW	NNW	NNW	N	N	NNE	NNE	NNW	10
NNW	NNW	NNW	NNW	NNW	N	N	N	NNE	SE	N	NNW	NNE	11
NW	NW	NW	NW	NW	NNW	N	N	N	WSW	W	SSW	NW	12
NW	NW	NW	NW	NW	NNW	NNW	NNW	N	N	N	N	NW	13
NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NNW	N	N	N	14
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	ENE	NNW	N	15
NNW	N	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	16
NNW	N	N	N	N	N	N	N	NNE	NNE	NNE	NNW	N	17
N	N	N	N	N	N	N	N	N	N	N	N	N	18
NW	NW	NW	NW	NW	NW	WNW	NW	NW	SW	SW	W	NW	19
WNW	WNW	WNW	NNW	NW	NW	NNW	SSE	S	S	S	SW	W	20
NW	NW	NNW	NNW	NNW	NNW	N	N	NNW	N	N	N	NNW	21
NW	NW	NNW	NNW	N	N	N	N	NNW	NNW	NNW	N	N	22
NW	NNW	NNW	NW	NW	NNW	NNW	NNW	NNW	N	N	N	NNW	23
NW	NW	NW	NW	WNW	WNW	WNW	SW	WSW	SW	SSW	SW	NW	24
NW	NW	NW	NW	NW	NW	NW	WNW	W	WNW	WNW	WNW	WNW	25
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	26
NW	NW	NW	NW	NW	NW	NNW	NW	WNW	NW	NNW	NNW	NW	27
NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	28
NW	NW	NW	NNW	NNW	NNW	NNW	NNW	N	NNW	NNW	NNW	NNW	29
NW	NW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	NNW	30
NW	NW	NW	NW	WNW	WNW	WSW	SW	SW	SW	WSW	WNW	NW	31
NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	Mean.

APRIL.

W	WNW	WNW	WNW	WNW	NW	NW	WSW	SW	WSW	WSW	W	W	1
W	NW	WNW	WNW	WNW	NW	NW	N	N	N	N	NE	NNW	2
NW	NW	NW	NW	NW	NNW	NNW	NNW	N	NNE	N	N	NNW	3
NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNE	NNE	NNE	N	4
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NNW	5
W	W	WNW	WNW	WNW	WNW	WNW	WNW	WSW	SW	W	WNW	W	6
W	W	WSW	W	W	W	W	W	WSW	SW	W	W	WSW	7
W	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	WNW	SW	WSW	8
WNW	WNW	WNW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	WNW	9
NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	NNW	10
NW	NW	NW	NNW	NNW	NNW	NNW	N	N	N	N	N	NNW	11
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	WSW	SW	WSW	NNW	12
WNW	WNW	WNW	NW	NW	WNW	NW	N	N	WNW	WNW	NW	NW	13
WNW	WNW	WNW	WNW	NW	NW	NW	NW	WNW	SW	SW	SW	W	14
WNW	WNW	WNW	WNW	NW	NW	NW	NNW	NNW	NNW	NNW	N	NW	15
W	W	WNW	WNW	WNW	WNW	WNW	NW	NW	NNW	NNW	NNW	NW	16
WNW	WNW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	N	N	NW	17
NW	NW	NW	NW	NNW	NNW	NNW	NNW	N	N	N	NNW	NNW	18
NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NNW	NNW	NNW	NNW	19
NNW	N	N	N	N	NNW	NNW	NNW	NNW	NNW	N	NNW	N	20
NNW	NW	NW	NW	NNW	NNW	NNW	NNW	NW	NNW	NNW	NNW	NNW	21
NW	NW	NW	NW	WNW	WNW	WNW	WNW	NW	NW	NNW	NNW	NW	22
NW	NW	NW	NW	NNW	NNW	NNW	NNW	N	NE	NE	NW	NW	23
NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	WNW	24
NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NW	25
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	NNW	26
N	NNW	NNW	NNW	NNW	N	NNW	NNW	NNW	NNW	NNW	NNW	NNW	27
NNW	NNW	NNW	NNW	NNW	NNW	N	N	NNW	NNW	NNW	NNW	NNW	28
NNW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNW	29
NNW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	30
NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	Mean.

DIRECTION OF WIND, 1931.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY.

Date.	Hours.											
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12
1	NNW	N	SE	S	SSW	WSW	WNW	NW	NW	NW	NNW	NW
2	N	N	N	NNE	NE	NE	SE	S	SW	WSW	WSW	WSW
3	N	N	NE	ENE	ENE	ESE	E	SSW	SW	SW	SW	SW
4	ENE	ENE	ENE	NE	NE	NNE	NNE	SW	SSW	SW	WSW	WSW
5	N	N	N	NNE	NE	NE	NE	E	ESE	S	W	W
6	N	N	N	N	NE	NE	NE	NE	SSE	NW	WNW	WNW
7	NNW	NNW	NNW	N	N	NE	S	SSW	SW	SW	SW	SW
8	WSW	WSW	WSW	WSW	WSW	W	W	W	W	W	SW	SW
9	WSW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	W
10	WNW	W	WSW	W	W	W	WSW	WSW	WSW	WSW	W	W
11	W	WNW	WNW	WNW	NW	NW	NW	WNW	WNW	WNW	WNW	WNW
12	W	WNW	WNW	WNW	NW	WNW	WNW	WNW	WNW	W	W	W
13	WNW	W	WSW	WSW	W	W	WSW	W	W	SW	WNW	WNW
14	W	W	WNW	W	W	W	W	W	W	WNW	WNW	WNW
15	NW	NW	NW	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
16	WNW	WNW	NW	WNW	NW	NW	NW	NW	WNW	WNW	NW	WNW
17	NNW	NNW	NW	NW	NW	NW	WNW	WSW	W	W	W	W
18	NW	NW	NW	WNW	NW	WNW	NW	W	W	W	W	W
19	NW	NW	WNW	WNW	WNW	W	WNW	WNW	WNW	WNW	WNW	WNW
20	NW	WNW	NW	NW	NW	NW	NW	NW	WNW	WNW	WNW	WNW
21	WNW	WNW	WNW	NW	NNW	NNW	N	NW	SE	NW	NW	NW
22	WNW	NW	NW	NW	NW	NNW	NNW	NW	NW	NW	NW	NW
23	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	WNW	WNW
24	NNW	NW	NW	NW	NW	WSW	SW	SW	SSW	SSW	SW	SW
25	NNW	NNW	NNW	NW	WNW	SW	SSW	SSW	SW	SW	W	W
26	NW	NW	WNW	WSW	SW	WSW	WSW	WSW	W	W	W	W
27	NW	NW	NW	NW	WNW	WNW	W	W	WSW	SW	W	WNW
28	NW	NNW	NNW	NNW	NNW	NW	NNW	NW	NNW	NW	WNW	WNW
29	NW	NW	NW	NW	NW	NW	WNW	NNW	SSE	SW	WNW	WNW
30	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	NNW	NW	WNW	NW
31	N	N	N	N	NE	NE	NNE	ENE	E	E	NW	NW
Mean.	NW	NW	NW	NW	NW	WNW	WNW	W	WSW	W	W	W

JUNE,

1	NW	NW	NNW	NNW	NNW	NW	NNW	NW	NW	NW	NW	NW
2	ESE	ESE	SE	SE	SE	SE	SE	SE	SSE	WNW	WNW	WNW
3	NW	NW	WNW	W	WNW	NW	NNW	NNW	NNW	NNW	NW	NW
4	WSW	SW	SW	SW	WSW	WSW	WSW	W	WNW	NW	NW	NW
5	SW	WSW	WSW	WSW	W	W	W	WNW	NW	NW	NW	NW
6	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW
7	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	NW
8	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW
9	NW	NW	WNW	WNW	WNW	W	W	W	W	W	W	W
10	SW	SW	SW	WSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW
11	SSW	SSW	SSW	SSW	SSW	SSW	S	SSW	SSW	SW	SW	SW
12	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SSW
13	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SSW
14	SSW	SSW	SSW	S	SE	SSE	SSE	SE	WNW	NNW	NE	NE
15	S	S	SSW	S	SSE	S	SSE	SSE	SSW	SSW	SW	WSW
16	W	W	W	W	W	WSW	WSW	SW	SW	SW	SW	WSW
17	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW	WSW	SW
18	W	W	W	W	WSW	WSW	WSW	SW	SW	SW	WSW	W
19	NW	NW	NW	NNW	NW	NW	NW	NW	WNW	WSW	SSW	SW
20	WNW	W	W	WNW	WNW	NW	NW	NW	NW	NW	NW	NW
21	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	WNW	WSW	W
22	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NNW	NNW
23	WNW	WNW	NW	NW	NNW	NNW	NW	NNW	NW	NW	NW	NW
24	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	WNW
25	WSW	WSW	WSW	WSW	WSW	WSW	SW	SSE	SSE	W	W	W
26	W	W	W	W	WNW	WNW	W	WNW	WSW	SW	SW	SW
27	WNW	WNW	NW	NW	NW	NW	WNW	SE	SE	SSE	SW	NW
28	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	W	WNW	NW	NNW
29	WSW	SSW	S	S	S	SSE	SSW	SW	SSW	SSE	SSE	WSW
30	WSW	WSW	WSW	SSW	SSW	SW	SW	SW	SW	SW	WSW	WSW
Mean.	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	W

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY.

Hours.												Mean.	Date.
12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24		
NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NW	1
W	W	W	WNW	WNW	NW	NW	NW	NNW	NNW	NNW	N	NW	2
SW	WSW	W	W	W	WNW	NW	NW	NNW	NNW	NNW	NNE	W	3
W	W	W	WNW	NW	NW	NW	NW	NW	NNW	NNW	NNW	WNW	4
WNW	WNW	WNW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	5
WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NW	6
WSW	WSW	WSW	W	W	W	W	W	W	W	WSW	WSW	W	7
WSW	W	W	W	W	W	W	WSW	SW	SW	WSW	WSW	WSW	8
W	W	W	W	W	W	W	W	WSW	WSW	WSW	WSW	WSW	9
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W	W	10
NW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	WNW	WNW	WNW	11
WSW	WNW	WNW	WNW	NW	NW	NW	WNW	NW	NW	WNW	WNW	WNW	12
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W	WSW	W	13
WNW	WNW	NW	NW	NW	NW	WNW	WNW	WNW	WNW	WNW	NW	WNW	14
WNW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	W	W	NW	15
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	16
WNW	WNW	WNW	NW	NW	NW	NW	WNW	W	WNW	WNW	WNW	WNW	17
W	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	18
WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	19
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W	W	WNW	20
NW	NW	NW	NW	NW	NW	NW	WNW	WNW	W	WNW	WNW	NW	21
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	22
WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NNW	NNW	NNW	NNW	NW	23
W	W	W	W	W	W	WNW	NW	NW	NW	NNW	NNW	W	24
WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	WNW	25
W	W	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	WNW	26
WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	27
WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NNW	NW	NW	28
WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NNW	NNW	NNW	NW	29
NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	N	NW	30
NW	NW	NW	NW	NW	NNW	N	NNW	NNW	NNW	NNW	NW	NNW	31
WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	WNW	Mean.

JUNE.

NW	NW	NW	WNW	SE	NE	E	E	NE	NE	NW	ESE	NNW	1
NW	NW	NW	NW	NW	WNW	WNW	WSW	WNW	NW	NW	WNW	WNW	2
NW	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NW	NW	3
NW	NW	NW	NW	NW	NW	NW	NW	WNW	WNW	W	SW	WNW	4
NW	NW	NW	NW	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	5
NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	NW	NW	NW	6
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	7
NW	NW	NW	NNW	NNW	NNW	NNW	NW	NW	NW	WNW	WNW	NW	8
W	WNW	WNW	WNW	WNW	NW	WNW	W	W	W	WSW	SW	W	9
SW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	SSW	SSW	SW	10
SW	SW	SW	SW	SW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	11
SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	12
SSW	SW	SW	SSW	SSW	SW	SW	SW	SW	SSW	SW	SW	SSW	13
S	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	S	S	S	S	14
WSW	WSW	WSW	WSW	WSW	SW	SW	W	W	W	W	W	SW	15
W	W	W	W	W	W	W	WSW	WSW	WSW	WSW	WSW	WSW	16
SW	WSW	W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W	17
WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	WNW	18
SW	WNW	WNW	NW	NW	NW	NW	NW	NW	WNW	NW	WNW	WNW	19
NW	NW	NW	NW	WNW	NW	NW	WNW	WNW	W	W	W	WNW	20
SW	SW	WSW	WSW	W	WSW	WSW	WNW	WNW	WNW	WNW	WNW	W	21
NW	NW	NW	WNW	NW	NW	NW	WNW	NW	NW	WNW	WNW	NW	22
NW	NW	NW	NW	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	23
W	W	W	W	W	WSW	WSW	WSW	WSW	WSW	WSW	SW	W	24
W	W	W	W	W	W	W	W	WSW	W	W	WNW	WSW	25
W	WNW	NW	WNW	NW	NW	WNW	WNW	W	WNW	WNW	WNW	WNW	26
WNW	WNW	WNW	WNW	WNW	W	W	SW	WSW	WSW	WSW	SSW	W	27
N	N	N	N	ENE	N	NNW	WNW	W	WSW	SW	SW	WSW	28
W	WNW	WNW	WNW	W	WSW	W	W	W	SW	SSW	SSW	SW	29
WSW	W	WNW	WNW	WNW	W	W	WNW	W	WSW	WSW	SW	WSW	30
W	W	W	W	W	W	W	W	W	WSW	WSW	WSW	WSW	Mean.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JULY.

Date.	Hours.											
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12
1	SSW	SW	S	SSE	SSW	S	SSE	S	SW	SSW	WSW	W
2	SW	SW	SW	SW	SW	SW	SSW	WSW	W	WNW	W	W
3	W	W	W	W	W	W	W	W	W	WSW	W	W
4	WNW	WNW	WNW	WNW	WNW	WNW	W	W	W	W	W	W
5	NW	NNW	N	NE	E	WNW	WNW	NNW	NNW	ENE	SE	S
6	SW	S	SSW	SW	SW	WSW	SW	SW	SW	SSW	SSW	SSW
7	SSE	SSE	S	W	W	WSW	W	E	SE	SE	SSW	W
8	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W	W	W	WSW
9	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	WSW
10	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW	WSW	WSW	WSW
11	W	W	W	WSW	W	W	W	W	WNW	WNW	W	W
12	W	W	W	WNW	W	WNW	W	W	WSW	W	WNW	W
13	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW
14	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W	W
15	WSW	WNW	W	SE	SW	W	W	WSW	WSW	SW	SW	WSW
16	SW	SE	E	WNW	W	W	SSW	W	WNW	W	W	WSW
17	WNW	WNW	W	W	WNW	WNW	WNW	W	W	W	WNW	W
18	WSW	WSW	WSW	WSW	SW	SW	SW	WSW	SW	WSW	WSW	WSW
19	WSW	WSW	WSW	WNW	WNW	W	WSW	WSW	WSW	WSW	WSW	W
20	W	W	WSW	SW	WSW	W	W	W	WNW	WNW	W	W
21	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	WSW	WSW
22	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SW	SW
23	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
24	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NNW	WNW	WNW	WNW
25	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NNW
26	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SW	SW	SSW
27	WNW	WSW	SW	SSE	S	SSW	S	S	SSW	SSW	SSW	SSW
28	SW	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW
29	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W	W	WNW
30	W	W	W	WNW	WNW	WNW	W	WNW	WNW	WNW	W	W
31	WSW	WSW	WSW	WSW	SW	W	SW	WSW	WSW	W	W	WNW
Mean.	W	W	W	W	W	W	W	W	W	W	W	W

AUGUST.

1	SSW	SSW	S	SSW	SSW	SSW	S	S	S	SSE	SSE	WSW
2	WSW	W	W	W	W	WNW	WNW	W	W	W	NW	W
3	WNW	WNW	W	WNW	W	WNW	NW	WNW	WNW	W	W	W
4	WSW	WSW	WSW	WSW	W	WSW	WSW	WSW	WSW	WSW	W	WSW
5	WSW	WSW	WSW	WSW	WSW	WNW	W	WNW	W	W	W	WSW
6	WNW	WNW	WNW	WNW	WNW	WNW	W	W	W	WSW	WNW	W
7	WNW	WSW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW
8	W	WNW	NW	NNW	NNW	NNW	NW	NW	NW	NW	NNW	NW
9	WNW	WNW	WNW	WNW	WNW	WNW	W	W	WSW	SW	SW	WSW
10	W	W	WNW	WNW	W	W	W	W	W	W	WNW	WNW
11	W	W	W	W	W	W	W	W	W	WNW	W	W
12	W	W	W	W	W	W	W	W	W	W	W	W
13	W	W	W	W	W	W	W	W	W	W	W	W
14	W	W	W	WNW	WNW	WNW	WNW	WNW	WNW	W	W	W
15	W	W	WNW	W	W	W	W	W	W	WNW	WNW	W
16	W	W	W	W	W	WNW	WNW	W	W	W	W	W
17	W	W	W	W	W	W	W	W	W	W	W	W
18	W	W	W	W	WSW	W	W	W	W	W	W	W
19	WSW	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	W
20	W	W	W	W	W	W	W	W	WSW	W	W	W
21	W	W	W	W	W	W	W	W	WNW	WNW	W	W
22	W	W	W	W	W	W	W	W	W	W	W	W
23	W	W	W	W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW
24	W	WNW	WNW	W	W	W	W	W	NW	NW	W	W
25	W	W	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW
26	WSW	WSW	W	W	W	W	W	WNW	W	WNW	WSW	WSW
27	WSW	WSW	WSW	W	W	W	W	W	W	W	W	W
28	W	W	W	W	W	WNW	WNW	W	W	W	W	W
29	W	W	W	W	W	W	W	WNW	W	WSW	W	W
30	W	W	W	W	WNW	WNW	W	W	WNW	WNW	WNW	WNW
31	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW
Mean.	W	W	W	W	W	W	W	W	W	W	W	W

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JULY.

Hours.												Mean.	Date.
12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24		
WSW	W	W	W	W	WSW	SW	SW	WSW	SW	SW	WSW	SW	1
W	W	W	W	W	WNW	W	W	W	W	W	W	W	2
WNW	WNW	WNW	WNW	W	W	W	WNW	WNW	WNW	WNW	WNW	W	3
W	W	W	W	W	W	W	W	WNW	WNW	WSW	SW	W	4
WNW	SW	NW	NW	SW	SSW	SSW	SSW	SSW	W	NW	NW	WNW	5
SSW	SW	SW	SW	SSW	S	S	S	SSE	SSE	SSE	SSW	SSW	6
W	W	WSW	WSW	W	WNW	W	WSW	W	W	W	W	WSW	7
W	WNW	W	WSW	W	WSW	WSW	WSW	WSW	WSW	SW	SW	W	8
WNW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	9
WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	WSW	10
W	W	W	W	W	W	W	W	W	W	W	W	W	11
W	W	WNW	WNW	WNW	WNW	WNW	WNW	NW	WNW	WNW	WNW	WNW	12
WNW	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	WNW	WNW	WNW	13
WSW	W	W	W	W	W	WNW	WSW	WSW	WSW	SW	WNW	W	14
ENE	WNW	NNW	NNW	NE	NW	NW	WNW	WSW	SSW	SSW	SSE	W	15
W	WSW	WSW	W	W	WSW	W	W	W	W	W	W	W	16
W	WSW	W	W	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	W	17
WSW	WSW	WSW	W	WSW	WSW	WSW	SW	SW	SW	WSW	WSW	WSW	18
WNW	WNW	W	SW	SW	SSW	SW	SW	WSW	WSW	WSW	WSW	WSW	19
W	W	WNW	W	W	W	W	W	WSW	WSW	W	WSW	W	20
WSW	SW	SW	SW	SW	WSW	WSW	WSW	SW	WSW	WSW	WSW	WSW	21
SW	SSW	SW	SW	SW	SW	WSW	WSW	WSW	SW	SSW	SW	SW	22
W	W	W	WSW	W	SW	SW	SSW	SW	WSW	WNW	WNW	W	23
WNW	WNW	WNW	WNW	WNW	NW	WNW	NW	NW	NW	NW	NW	WNW	24
NNW	NNW	NNW	NNW	N	N	NE	SE	S	SE	SE	SSE	NW	25
SSW	S	SSW	SW	SW	WSW	SW	WSW	WSW	SW	W	W	SW	26
SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SW	SW	SW	SSW	SSW	27
WSW	WSW	WSW	SW	WSW	SW	WSW	WSW	W	WNW	WNW	WNW	WSW	28
W	WSW	WNW	W	W	NW	NW	NW	WNW	WNW	WNW	W	WNW	29
W	W	W	W	W	W	W	WSW	SW	SW	SW	WSW	W	30
WNW	WNW	W	WSW	WSW	SW	SW	SW	SW	SW	SW	SSW	WSW	31
W	WSW	W	W	WSW	W	WSW	WSW	WSW	WSW	W	W	W	Mean.

AUGUST.

W	WNW	NW	W	WSW	WNW	WNW	WSW	WSW	SW	SW	WSW	SW	1
W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	2
W	W	W	W	WNW	WNW	WNW	WNW	WNW	W	W	WSW	W	3
WSW	WSW	WSW	WSW	WSW	WSW	W	WSW	W	WSW	WSW	WSW	WSW	4
WSW	W	W	WNW	W	WNW	WNW	WNW	W	WSW	WNW	WNW	W	5
WNW	W	W	W	W	WSW	WSW	W	W	WNW	WNW	WNW	W	6
NNW	NNW	NW	NW	NW	WNW	NW	NW	NW	WNW	WNW	W	WNW	7
NNW	NW	NW	WNW	WNW	WNW	W	WNW	WNW	WNW	WNW	WNW	NW	8
W	WSW	WSW	WSW	W	W	WSW	WSW	WSW	WSW	WSW	W	W	9
WNW	W	W	W	WSW	W	WSW	W	W	W	W	W	W	10
W	W	WSW	WSW	W	W	W	W	W	W	W	W	W	11
W	W	W	W	W	W	W	W	W	W	W	W	W	12
W	W	W	WNW	WNW	WNW	W	WNW	W	W	W	W	W	13
W	W	W	W	W	W	W	W	W	W	W	W	W	14
W	W	W	W	W	WNW	W	W	W	W	W	W	W	15
W	W	W	W	W	W	WSW	WSW	W	W	W	W	W	16
W	W	W	W	W	W	W	W	W	W	WSW	W	W	17
W	W	W	WSW	W	WSW	WSW	WSW	W	W	W	W	W	18
W	W	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	19
W	W	W	W	W	W	WSW	WSW	W	W	W	W	W	20
W	W	W	W	W	W	W	W	W	W	W	W	W	21
W	W	W	WNW	W	W	W	W	W	W	W	W	W	22
WNW	WNW	WNW	WNW	WNW	WNW	W	WNW	WNW	WNW	W	W	WNW	23
W	W	W	W	W	W	W	W	W	W	W	W	W	24
WSW	W	W	WSW	W	WNW	WNW	WNW	WNW	W	WNW	W	W	25
WSW	WSW	W	W	W	W	W	WNW	NNW	NW	WSW	WSW	W	26
W	W	WNW	WNW	W	W	W	W	W	W	W	W	W	27
W	W	W	W	W	W	WNW	WNW	W	W	W	W	W	28
W	W	W	W	W	W	W	W	W	W	W	W	W	29
W	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	WNW	WNW	30
NW	NW	NW	NW	NW	NW	NW	WNW	WNW	WNW	WNW	WNW	NW	31
W	W	W	W	W	W	W	W	W	W	W	W	W	Mean.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER.

Date.	Hours.											
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12
1	WNW	WNW	NW	NW	WNW	NW	NW	NW	NW	NW	WNW	WNW
2	WNW	WNW	WNW	WNW	WNW	NW	WNW	NW	NW	NW	NW	NW
3	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	W	WNW	WNW
4	NW	WNW	WNW	WNW	W	WNW	WNW	WNW	W	W	W	W
5	WNW	WNW	WNW	WNW	WNW	NW	WNW	WNW	WNW	WNW	NW	NNW
6	NW	NW	NW	NW	WNW	WNW	WNW	NW	NW	NW	NW	NW
7	WNW	NW	WNW	WNW	WNW	NW	WNW	WNW	W	WNW	NW	NW
8	NW	NW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW
9	NW	NNW	NNW	NW	NW	NNW	SE	SE	SE	S	NNW	NW
10	NNW	E	SE	SE	SE	SE	SE	SE	ESE	ESE	NE	NW
11	NNW	NE	E	ESE	ENE	ENE	E	E	ESE	ESE	W	NW
12	NW	NW	NW	NW	NNW	NW	NW	NW	NW	WNW	W	WNW
13	WNW	WNW	WNW	WNW	WNW	S	E	SE	ESE	NW	NW	NW
14	NW	WNW	W	WNW	NW	SSE	SE	SSE	SE	SSE	SSE	NW
15	NNW	NNW	NNW	ESE	ESE	NE	ESE	E	E	NNW	NNW	NW
16	WNW	NW	E	SE	SE	SE	SE	SE	SE	SE	NW	NW
17	NNW	NW	NNW	NNW	NNE	ENE	ENE	ENE	N	N	NNW	NNW
18	NNW	E	SW	SW	ENE	NNE	NW	NNW	N	N	NNW	NNW
19	NW	NE	E	ENE	E	E	E	E	ENE	ENE	WNW	W
20	SE	SE	SE	SE	SE	SSE	SSE	SE	SE	SE	SE	S
21	SW	WNW	NNW	N	W	WNW	NW	W	W	WNW	W	NW
22	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW
23	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW
24	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW
25	WNW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	WNW	WNW
26	NW	NW	NW	WNW	NW	NW	NW	NW	NW	NW	NW	NW
27	NW	NW	NW	NW	NW	NNW	NNW	NNW	WNW	NW	NW	NW
28	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW
29	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NW
30	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW
Mean.	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW

OCTOBER.

1	SE	SE	SE	SE	SE	SE	SSE	SSE	SE	NNW	NNW	NNW
2	Variable	ENE	NNW	WNW	WNW	WNW	NW	NNW	NNW	NNW	NW	NNW
3	SSW	S	SSW	NNW	WNW	SE	SSE	S	SSW	SE	E	ESE
4	N	N	SE	SE	SE	SE	SE	SE	S	SSW	SSW	SW
5	ENE	ESE	ENE	E	ESE	E	E	ESE	E	SSE	SSW	SSW
6	N	NNW	E	ESE	SE	ENE	SSE	SSE	SSE	S	SSW	SW
7	NW	WSW	NW	WNW	W	SSE	W	SW	S	SE	SW	SSW
8	W	W	WNW	WNW	WNW	WNW	WNW	W	W	WNW	WNW	WNW
9	SW	WSW	WSW	WSW	WNW	WNW	WNW	WNW	W	WSW	WSW	WSW
10	SSW	SW	SW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW	SSW
11	S	SSW	SSW	SSW	SSW	SSW	WSW	WSW	SW	SW	SW	SW
12	SW	SW	SW	SSW	S	S	SSW	S	SSW	SSW	SSW	S
13	S	SSW	SSW	SSW	SSW	SSW	SSW	S	S	S	S	SSW
14	W	W	W	WNW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW
15	W	W	W	W	W	W	W	W	W	W	W	WNW
16	SW	SW	SW	SW	WNW	WNW	W	WSW	WSW	SW	W	W
17	S	S	S	SSE	SSE	S	SSE	SSW	SSW	S	SSW	SSW
18	SE	ESE	SE	SSE	ESE	ESE	SE	SE	SE	SE	SE	SW
19	W	SW	NE	NE	NE	NE	NNE	NE	N	N	NNW	NNW
20	N	N	NE	NE	NE	NE	ENE	E	E	E	E	ESE
21	ENE	ENE	ENE	ENE	ENE	E	E	ENE	ENE	ENE	E	E
22	NE	NNE	NNE	NE	ENE	ENE	E	E	ENE	ENE	ENE	ENE
23	ENE	ENE	NE	NNE	NE	NE	ENE	ENE	ENE	ENE	ENE	E
24	E	ENE	E	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E
25	SE	ESE	NE	ENE	E	NE	ENE	E	ENE	ENE	ENE	E
26	NE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE
27	NE	NE	ENE	ENE	ENE	ENE	ENE	E	ENE	E	ENE	ENE
28	NE	NNE	NE	ENE	E	E	ENE	ENE	E	ESE	ENE	ENE
29	NNE	NE	ENE	E	NE	NE	NE	ENE	ENE	ENE	ENE	NE
30	NE	NE	NE	NE	NNE	NNE	NE	NE	E	ENE	ENE	E
31	NNE	NNE	ENE	ENE	NNE	NNE	NE	ENE	ENE	ENE	NW	NW
Mean.	SSW	SSW	S	SSE	SSE	SSE	S	SSE	S	S	SSW	SW

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER.

Hours.												Mean.	Date.
12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24		
NW	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	WNW	1
NW	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	2
WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	3
WNW	WNW	NW	NW	WNW	NW	WNW	NW	WNW	WNW	WNW	WNW	WNW	4
NW	NW	NW	WNW	WNW	NW	NW	WNW	WNW	NW	WNW	WNW	WNW	5
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	NW	6
NW	NW	NW	NNW	NNW	NNW	NNW	NW	NW	NNW	NNW	NW	NW	7
NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NW	NW	NW	NW	8
NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	N	NW	NNW	NNW	9
NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	10
NW	NW	NW	NW	NW	NW	NNW	NNW	NW	NNW	NNW	NW	NNW	11
WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	NW	12
NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NW	NW	NW	NW	13
NNW	NNW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	14
NW	NW	NW	NW	NW	NW	NW	NW	WNW	WNW	WNW	WNW	NNW	15
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NNW	NW	NW	16
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NW	NNW	17
NNW	NNW	NW	NW	NW	NNW	NE	NE	NE	NE	NE	NE	N	18
SSW	SW	SW	SW	SSW	SSW	SSW	S	SE	SE	SE	SE	SSE	19
SW	SW	SW	SSW	SSW	SSW	SSW	SSW	S	SSE	SE	SE	SSE	20
NW	NW	NW	NW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	21
WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	WNW	NW	WNW	NW	22
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	23
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	24
WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	25
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	26
NW	NW	NW	NW	NW	NW	NW	NW	WNW	WNW	WNW	WNW	NW	27
NW	NW	NW	NW	NW	NW	NW	NW	WNW	WNW	WNW	WNW	WNW	28
NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NW	NW	NW	NW	NW	29
NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	SE	S	NNW	30
NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	NW	Mean.

OCTOBER.

NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	ENE	ENE	NNE	1
NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	N	N	SE	NW	2
SE	WNW	NW	NW	NNW	NNW	NNW	NNW	NNW	NW	NW	NNW	NW	3
SW	SW	SW	SW	WNW	WNW	NW	WNW	NW	N	N	ENE	SW	4
W	WSW	WSW	WSW	W	NW	NW	NW	NW	NNW	NNW	NNW	NW	5
NW	W	W	W	WNW	WNW	W	WSW	SW	W	N	NW	W	6
SSW	SW	SW	SW	SSW	SW	SW	SSW	SW	SW	SW	WSW	SW	7
WNW	WNW	WNW	WNW	WNW	NW	WNW	WNW	WNW	W	SSW	SW	WNW	8
WSW	W	W	W	W	WSW	SW	SW	SW	SW	SW	SSW	WSW	9
SSW	SSW	SW	SW	SW	WSW	SW	SW	SSW	S	SSE	S	SW	10
SW	SW	SSW	SSW	SSW	SSW	SW	SSW	SW	SW	SW	SW	SW	11
SSW	SSW	SE	SSE	SSW	SSW	S	S	SSW	S	SSW	S	SSW	12
SSW	SW	SW	SW	W	SW	SW	SSW	SW	SW	SW	WSW	SSW	13
WSW	W	WNW	WNW	W	WNW	WNW	W	W	W	W	W	W	14
W	WNW	WNW	WNW	W	W	WNW	W	WSW	WSW	WSW	SW	W	15
SW	WSW	SSW	SW	SW	WSW	SSW	SSW	SSW	SSE	SSE	S	SW	16
SSW	SW	SW	SW	SW	WSW	ENE	NE	ENE	SE	SE	SE	S	17
W	W	WNW	WNW	WNW	WNW	WNW	NW	NW	WSW	W	W	SSW	18
NNW	NW	NW	NNW	NNW	NNW	NNW	N	N	N	N	N	NNW	19
N	NNW	NNW	NNW	NNW	N	N	N	N	N	N	NNE	N	20
NW	NW	NW	NW	NNW	NNW	N	N	N	N	NNE	ENE	NNE	21
ENE	NNW	NNW	NNW	NNW	NNW	N	N	N	NNE	NNE	N	NNE	22
WNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	NE	NNE	23
ENE	ENE	NW	NW	NW	NNW	NNW	N	N	N	NNE	ENE	NE	24
E	NW	NW	NW	NW	NNW	NNW	NNW	N	N	NE	NE	NNE	25
ENE	E	NW	NW	NNW	NNW	NNW	NNW	N	N	NE	E	NE	26
E	ENE	ENE	ENE	NW	NNW	N	N	N	N	N	ENE	NE	27
ENE	ENE	ENE	NW	NW	NNW	N	N	N	NNE	NNE	NNE	NE	28
ENE	NNW	N	N	N	N	N	N	NNE	NNE	NNE	NNE	NNE	29
ESE	NNW	NNW	NNW	N	N	N	N	N	N	N	N	NNE	30
NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	N	NNE	N	31
WSW	W	WNW	WNW	WNW	NW	NW	NW	NW	WNW	WNW	SW	W	Mean.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER.

Date.	Hours.											
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12
1	NNE	NNE	NNE	NNE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE
2	NNE	NNE	NNE	ENE	NE	NE	SE	SE	SSE	SSE	SSE	SE
3	SSE	SE	SE	SSE	SE	SSE	ESE	ESE	E	E	SE	W
4	N	NE	N	N	NE	NE	E	E	E	E	ESE	NNW
5	N	N	N	N	N	NNE	N	N	E	E	NNW	NNW
6	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE
7	ESE	ESE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE
8	NE	NE	ENE	ENE	ENE	ENE	E	E	E	ENE	ENE	ENE
9	ESE	E	ENE	ENE	ENE	ENE	ENE	E	E	ENE	ENE	ENE
10	ESE	E	NE	NNE	ENE	NE	NE	E	ESE	ESE	SE	E
11	NNE	NNE	NNE	NNE	NE	ENE	ENE	ENE	ESE	ESE	SE	SW
12	ESE	ESE	E	E	ESE	SSE	ENE	E	E	NNW	NNW	NNW
13	ENE	ENE	NE	NE	NE	NE	E	E	E	ESE	E	E
14	ENE	ENE	ENE	E	E	E	E	SSE	E	ESE	ESE	E
15	SE	ESE	NNE	NNE	NE	E	E	E	E	ESE	ESE	SE
16	NNE	NNE	NNE	E	ENE	ENE	ENE	E	SE	SE	SE	E
17	NE	NNE	ESE	ENE	ENE	E	E	ESE	ESE	ESE	E	ENE
18	E	ENE	ESE	ESE	ENE	E	ESE	E	ESE	ESE	ESE	E
19	ENE	ENE	E	E	E	E	ESE	ESE	ESE	SSE	SSE	SSE
20	E	ENE	ENE	E	E	E	E	ESE	E	E	E	E
21	ENE	ENE	E	E	ESE	ENE	ESE	ENE	ENE	ENE	E	ENE
22	ENE	E	E	ENE	E	E	ESE	ESE	ESE	ESE	E	E
23	E	E	ENE	ENE	ENE	ENE	E	E	ESE	E	ENE	ENE
24	ENE	ENE	E	ENE	ENE	E	E	ENE	E	E	ENE	ENE
25	NE	NNE	NNE	NE	NE	E	ENE	ENE	ENE	E	E	SE
26	SE	ENE	ENE	ENE	ENE	E	ENE	ENE	ENE	E	ENE	ENE
27	NE	ENE	ENE	ENE	ENE	NE	ENE	ENE	ENE	ENE	ENE	ENE
28	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	ESE	ESE
29	ESE	ESE	ENE	ENE	ESE	ESE	ESE	SE	ESE	ESE	E	ENE
30	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE
Mean.	ENE	ENE	ENE	ENE	ENE	ENE	E	E	E	E	E	ENE

DECEMBER.

1	ENE	NE	ENE	ENE	ENE	ENE	ENE	E	E	ENE	E	ENE
2	NE	NNE	NE	ENE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE
3	NNE	E	ENE	NE	ENE	NE	NE	ENE	ENE	ENE	ENE	ENE
4	NE	E	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	E
5	NE	ENE	ENE	ENE	E	E	E	E	E	E	E	E
6	ESE	ESE	SE	ESE	ESE	E	ESE	ESE	ESE	ESE	SE	ESE
7	NE	NNE	ENE	ENE	ENE	ENE	ENE	E	E	E	ENE	ENE
8	ENE	E	E	E	ENE	ENE	ESE	ESE	E	E	E	ENE
9	ENE	NE	ENE	ENE	NE	NE	NE	NE	ENE	ENE	ENE	ENE
10	N	N	NNE	NNE	NNE	NNE	NE	NNE	ENE	ENE	ENE	ENE
11	N	ENE	NE	ENE	NE	ENE	NE	NE	ENE	ENE	ENE	ENE
12	ENE	ENE	E	ENE	E	ESE	ESE	SE	SE	SE	SE	SE
13	NE	NE	E	ENE	ENE	NNE	NNE	NE	ENE	NNE	NE	ENE
14	NNE	NNE	NNE	NE	NE	NE	ENE	ENE	ENE	ENE	ENE	ENE
15	NE	ENE	NNE	NNE	ENE	ENE	NE	ENE	ENE	ENE	SE	WNW
16	ENE	ENE	ESE	E	E	NNE	NE	NE	ENE	ENE	ENE	NNW
17	NE	NE	NNE	NNE	NE	NE	NE	ENE	ENE	ENE	E	ESE
18	ENE	ENE	N	NNE	ENE	ENE	ENE	ENE	E	E	E	NW
19	NNE	NNE	NNE	NNE	NNE	NNE	NNE	ENE	ENE	ENE	ENE	ENE
20	NE	E	E	ENE	ENE	SE	SE	ESE	ESE	NE	SE	SE
21	NE	NE	NE	NE	NE	ENE	ENE	NE	NNE	SE	ENE	ENE
22	E	E	ESE	ENE	ENE	E	ESE	ESE	ESE	SE	SE	SE
23	ENE	ENE	ENE	NE	NE	NE	NNE	ENE	ENE	ENE	ENE	E
24	ESE	E	NE	ENE	ENE	E	E	E	ESE	E	ESE	S
25	NE	ENE	ENE	ENE	ENE	E	E	ENE	ENE	ENE	ENE	NE
26	ENE	NE	NE	ENE	ENE	ENE	E	E	ENE	ENE	ENE	ENE
27	NE	NE	NE	ENE	NE	NE	NE	NE	ENE	ENE	ENE	ENE
28	NNE	NE	N	NE	NE	NE	ENE	ENE	ENE	ENE	ENE	E
29	NNE	NNE	NNE	N	ENE	NE	NE	NE	ENE	ENE	ENE	E
30	ESE	NE	ENE	ENE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE
31	NNE	NNE	ENE	NNE	NNE	NE	NE	NE	ENE	ENE	E	NNW
Mean.	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	E	E	E

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER.

Hours.												Mean.	Date.
12—13	13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24		
ENE	NE	NNW	NNW	NNW	NNW	N	N	SE	SW	WSW	NW	NNE	1
SW	SE	E	SSW	SW	SW	SSW	S	ESE	SE	SSE	SSE	SE	2
W	WNW	NW	NW	NW	NW	NNW	N	N	N	N	N	SE	3
NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	N	N	4
NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	NE	NE	N	5
ENE	NW	NNW	NNW	NNW	N	N	N	N	N	N	ESE	NE	6
E	E	E	NNW	NNW	NNW	NNW	N	N	N	N	NE	NE	7
ENE	E	NW	NW	NNW	NNW	N	N	N	N	N	NE	NE	8
ENE	ENE	ENE	ENE	ENE	NE	NNE	NNE	ENE	E	ESE	ESE	ENE	9
E	NW	NW	NW	NW	NNW	NNW	NNW	N	N	NE	NNE	NNE	10
WNW	W	W	W	WNW	NW	N	NNE	NE	NNE	N	N	NNE	11
NNW	NNW	NNW	NNW	NNW	N	S	ESE	ESE	ENE	ENE	ENE	NE	12
WNW	NW	NNW	NNW	NNW	NNW	NNW	N	N	N	N	NNE	NNE	13
E	ENE	NW	NNW	NNW	NNW	N	NNW	NNW	N	NE	ESE	ENE	14
W	NW	NW	NW	NW	NNW	NNW	N	N	N	N	NNE	NNE	15
SE	ESE	NW	NNW	NNW	NNW	NNW	N	N	N	NNE	NNE	NNE	16
E	E	NW	NNW	NNW	NNW	N	N	N	N	NNE	NE	NE	17
E	E	NW	NNW	NNW	NNW	NNW	N	N	NNE	NE	NE	NE	18
E	E	NW	NNW	NNW	NNW	N	N	NNE	NNE	NNE	ENE	ENE	19
E	NNW	NNW	NNW	NNW	NNW	N	N	NNE	ENE	NE	NNE	NE	20
ENE	E	NW	NW	NNW	NNW	N	N	NNE	NNE	NNE	NNE	NE	21
ENE	ENE	NE	NNW	NNW	NNW	N	N	N	N	NE	ENE	ENE	22
ENE	E	NW	NW	NW	NNW	N	N	N	N	N	E	ENE	23
ENE	ENE	ENE	NNW	NNW	NNW	NNW	N	N	N	NE	ENE	NE	24
ESE	SE	WNW	NW	NW	NNW	NNW	N	N	N	NNE	NNE	NNE	25
ENE	NW	NW	NNW	NNW	NNW	NNW	N	N	NNE	NNE	E	NNE	26
ENE	ENE	ENE	NNW	NNW	N	N	N	N	N	NE	ESE	NE	27
E	ENE	NE	NE	NNE	NNE	N	N	NNE	NNE	NE	E	ENE	28
ENE	ENE	ENE	NNW	NNW	NNW	N	N	N	NNE	NNE	ENE	ENE	29
NE	ENE	NNW	NNW	N	N	N	N	N	NNE	NNE	NNE	NE	30
ENE	NE	NNW	NNW	NNW	NNW	N	N	N	NNW	NNW	ENE	NE	Mean.

DECEMBER.

ENE	E	E	NW	NNW	NNW	NNW	N	N	N	NNE	NE	NE	1
ENE	ENE	ENE	NW	NNW	NNW	N	N	N	N	NNE	NNE	NE	2
ENE	ENE	NW	NW	NNW	N	N	N	N	N	NNE	ENE	NE	3
ENE	ENE	ENE	NE	NE	NNW	N	N	N	N	NNE	NNE	NE	4
E	ENE	NE	NE	NNW	N	N	N	N	NNE	NE	SE	ENE	5
E	ENE	NE	NW	NNW	NW	NNW	NNW	N	NNE	NNE	NNE	E	6
ENE	ENE	ENE	NNW	NNW	NNW	NNW	N	N	NNE	NNE	NE	NE	7
E	SSE	NW	NNW	NNW	NNW	N	N	N	NNE	ENE	ENE	ENE	8
ENE	NW	NW	NNW	N	N	N	N	NNE	NNE	NNE	NNE	NNE	9
E	NW	NNW	NNW	NNW	N	N	N	NNE	NNE	N	NE	NNE	10
ENE	NE	NE	NNE	NE	NE	NE	NNE	N	N	NNE	ENE	NE	11
SE	ESE	E	E	E	E	E	ESE	ESE	ESE	NNE	NE	ESE	12
E	ESE	ESE	ENE	ENE	NE	NE	NNE	NE	NNE	NNE	NNE	ENE	13
E	SE	SE	SE	ESE	SE	ESE	ESE	ESE	ESE	ESE	ENE	E	14
WNW	WNW	NW	NW	NW	NNW	N	N	N	N	NNE	NE	NNE	15
NNW	NNW	NNW	NNW	N	N	N	N	N	NNE	NNE	NNE	NNE	16
WNW	NW	NW	NW	NW	NNW	N	N	N	NNE	NE	E	NNE	17
NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	NNE	N	N	18
E	NW	NW	NW	NW	NNW	N	N	N	NNE	NE	NE	NNE	19
SE	SE	SE	NW	NW	NNW	NNW	N	N	NNE	NNE	NE	E	20
NW	NW	NNW	NNW	NNW	N	N	N	NNE	N	NE	ENE	NNE	21
SE	WNW	NW	NW	NNW	NNW	NNW	N	N	N	NNE	ENE	NE	22
SE	NW	NW	NW	NW	NW	NNW	N	N	N	N	NNE	NNE	23
SW	NW	NW	NNW	NNW	N	N	N	N	NNE	NE	NE	NE	24
NE	NE	NE	NE	N	N	N	N	N	NNE	NE	ENE	NE	25
ENE	ENE	NE	N	N	N	NNE	NNE	NNE	NNE	NNE	NNE	NE	26
NE	NW	NNW	NNW	NNW	NNW	N	N	N	N	NNE	NNE	NNE	27
E	ENE	NNW	NNW	NNW	NNW	N	N	N	N	NNE	NNE	NNE	28
NW	NW	NW	NW	NNW	NNW	N	N	N	N	NNE	E	NNE	29
WNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NNE	NNE	NNE	30
NNW	NNW	NNW	NNW	NNW	NNW	N	N	N	NNE	N	NNE	N	31
ENE	NNE	N	NNW	N	N	N	N	N	NNE	NNE	NE	NE	Mean

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JANUARY. (IN DEGREES FAHRENHEIT.)

Date.	Hours.															
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	73·4	73·8	74·5	74·2	73·8	73·8	73·8	74·3	75·8	78·0	80·7	83·3	86·8	**88·7**	87·5
2	75·2	74·8	74·1	74·0	74·3	74·2	74·4	74·7	76·6	78·8	81·6	84·3	87·3	87·5	86·0
3	74·4	73·9	73·8	74·1	74·2	73·8	73·6	74·2	76·4	78·0	80·4	82·5	85·3	84·6	84·1
4	75·5	75·4	74·0	73·4	72·7	72·5	71·8	72·7	74·3	76·4	78·3	81·5	84·6	84·0	83·4
5	73·4	73·3	73·2	72·5	72·6	72·0	71·6	71·8	74·0	77·0	80·7	82·7	84·8	85·8	86·7
6	74·5	73·8	74·4	73·8	73·4	73·4	72·6	73·0	74·8	77·0	79·5	81·6	85·8	86·8	86 5
7	76·6	77·2	77·2	76·2	75·8	75·5	75·4	75·6	76·8	77·5	79·0	81·3	82·5	83·4	82·8
8	76·3	75·3	74·8	74·2	74·4	74·6	74·0	74·3	75·4	77·5	80·2	81·0	81·9	81.9	82·0
9	75·5	75·4	74·8	74·4	73·6	72·6	72·3	73·2	75·2	77·4	79·4	81·1	81·6	81·4	81·4
10	73·4	73·5	73·5	73·5	73·4	72·8	72·4	72·3	73·3	75·3	77·1	78·3	78·7	79·5	79·6
11	71·8	71·5	71·5	71·8	71·9	70·6	69·5	70·3	72·5	75·5	77.1	78·4	79·4	80·3	80·3
12	71·3	71·3	70·7	70·3	69·4	69·4	69·8	70·4	72·6	74·9	78·3	80·5	81·8	81·5	81·6
13	72·0	71·7	70·6	70·5	70·3	69·8	69·0	69·7	73·3	75·3	78·1	80·1	82·1	82·6	82·8
14	72·8	72·6	72·4	72·1	71·6	70·6	70·3	72·2	73·6	76·1	78 5	81·2	84·5	83·9	83·3
15	75·0	74·8	74·1	73·6	72·2	71·4	71·0	71·8	73·4	75·4	77·7	80·0	82·8	83·6	82·9
16	73·2	73·2	72·5	72·0	70·4	70·5	70·4	71·8	74.1	75·9	78·5	81·4	83 4	84·2	84·4
17	74·2	74·3	73·3	72·9	72·5	71·8	71·4	71·7	74·1	76·5	78·6	80·7	83·8	84·5	84·7
18	74·4	73·7	73·8	73·3	72·7	71·6	71·4	72·2	74·5	76·4	78·8	81·4	83·4	83·6	83·0
19	73·7	73·1	72·6	71·6	71·3	70·8	72·4	72·3	74·5	77·2	80·0	82·3	83·8	83·9	84·5
20	75·4	75·0	74·5	73·8	73·5	72·8	70·6	71·5	74·5	76·6	78·7	80·5	82·4	83·3	85·2
21	74·3	74·5	73·4	73·0	72·4	71·4	70·6	70·8	74·2	77·0	79·0	80·4	81·4	81·8	82·3
22	73·7	74·3	73·5	72·4	71·4	71·4	71·4	72·0	74·0	76·8	78·6	79·6	81·0	82·3	82 6
23	72·4	72·3	71·6	71·6	71·5	71·4	70·7	70·6	73·5	77·0	79·3	80·0	80·6	80·7	80·6
24	71·6	71·6	71·1	71·2	71·4	70·8	70·4	70·8	72·3	73·8	76·0	77·6	78·8	79·4	79·5
25	71·5	71·6	71·4	71·4	71·2	70·6	70·6	70·6	72·4	73·8	77·0	79·2	80·0	80·0	79·7
26	70·5	70·2	69·5	69·4	69·3	68·5	68·5	68·8	71·3	73·8	75·3	76·5	77·4	78·4	78·8
27	71·0	70·2	69·9	69·7	69·5	69·3	68·3	69·5	72·4	74·0	77·0	79·3	81·2	80·9	81·0
28	73·8	73·5	73·3	72·3	70·7	70·6	70·4	70·8	73·5	75·3	78·2	79·2	80·6	81·7	82·3
29	72·8	72·6	71·8	71·1	71·0	70·0	70·4	71·8	73·8	76·1	78·2	79·8	80·4	80·5	80·5
30	70·6	71·2	69·8	69·4	69·6	70·5	69·5	68·8	70·4	72·0	74·7	76·4	77·3	78·3	78·8
31	68·2	67·6	67·8	66·8	66·2	**65·4**	65·5	66·8	70·4	73·0	75·3	76·5	78·3	78·8	79·4
Mean . .	73·3	73·1	72·7	72·3	71·9	71·4	**71·1**	71·7	73·8	76·0	78·4	80·3	82·0	**82·5**	82·5
Variation .	−2·9	−3·1	−3·5	−3·9	−4·3	−4·8	**−5·1**	−4·5	−2·4	−0·2	+2·2	+4·1	+5·8	**+6·3**	+6·3
Mean in °C. .	22·9	22·8	22·6	22·4	22 2	21·9	**21·7**	22·1	23·2	24·4	25·8	26·8	27·8	**28·1**	28·1
Variation in °C. .	−1·7	−1·8	−2·0	−2·2	−2·4	−2·7	**−2·9**	−2·5	−1·4	−0·2	+1·2	+2·2	+3·2	**+3·5**	+3·5

FEBRUARY.

1	72·3	71·3	69·6	69·6	69·4	68·9	68·4	69·0	72·9	74·2	76·6	79·7	81·4	81·5	81·6
2	74·4	74·3	74·3	73·8	72·6	72·2	71·7	72·3	75·3	77 3	79·4	80·3	80·5	80·4	81·8
3	73·6	73·4	74·5	73·3	71·7	70·6	70·0	71·4	73·1	76 3	78·4	79·6	80·6	81·3	81·6
4	72·8	71·5	70·8	70·2	69·5	68 5	68.0	67·9	70·8	73·8	76·8	78·3	79·5	79·9	79·6
5	70·5	70·2	69·4	68·8	68·3	68·1	**67·7**	68·1	72·5	76·5	79·5	82·5	**84·3**	82·6	81·6
6	72·4	72·1	71·4	70·7	69·5	70·2	70·8	69·9	72·5	74·3	77·2	78·8	80·9	82·1	82·8
7	73·5	73·5	73·5	73·4	73·5	72·7	71·9	72·5	74·5	76·5	79·2	81·0	82·3	82·9	83·3
8	74·4	74·5	74·6	74·5	73·6	73·2	71·6	72·7	74·6	75·6	77·6	78·7	78·8	79·4	79·5
9	70·2	69·6	69·4	68·7	67·8	68·3	68·0	68·1	71·6	74·0	75·8	77·4	78·8	79·6	79·8
10	72·0	71·4	71·2	70·6	70·0	69·5	70·1	70·5	72·6	75·8	78·2	79·8	81·4	81·2	81·0
11	73·3	72·2	71·6	71·6	71·2	70·7	70·2	71·1	74·4	76·7	80·1	81·0	81·8	82·3	82·5
12	74·0	74·3	73·5	72·6	71·4	70·5	70·4	71·0	74·5	77·8	80·1	81·7	82·7	82·4	82·1
13	73·8	73·4	72·4	71·5	71·3	71·6	72·6	72·7	75·1	77·4	79·3	80·3	80·8	81·4	82·2
14	74·5	74·3	73·3	72·7	71·8	71·6	71·6	72·1	75·1	76·6	79·5	82·3	82·3	82·5	83·0
15	74·7	73·8	73·3	73·5	74·3	73·3	72·5	73·3	75·5	78·5	80·2	82·7	82·1	82·4	81·6
16	75·4	74·5	73·6	73·5	72·8	73·0	73·1	74·2	76·2	77·5	79·3	81·5	82·3	82·4	82·4
17	74·6	74·5	74·4	73·9	72·7	72·3	71·8	72·7	75·3	77·0	78·2	79·6	80·5	81·2	81·0
18	74·6	74·3	72·7	72·5	72·4	71 8	71.5	72·0	74·2	76·4	78·4	80·3	81·4	81·0	80·8
19	73·3	72 6	71·5	72·7	73·3	72·3	70·6	71·4	74·5	76·6	78·4	78·7	79·5	80·0	80·4
20	72 0	71·5	71·2	70·6	69·7	69·5	69·6	71·4	73·3	74·7	77·0	78·3	80·0	80·6	81·5
21	73·3	72·8	72·4	72·2	72 2	71·4	70·5	71·8	73·8	75·6	77·5	78·8	80·1	81·3	81·6
22	72·8	72·5	72·5	72·5	72·3	71·6	70·6	71·4	74·3	76·4	77.6	79·2	79·5	80·0	80·3
23	74·0	72·8	72·5	72·6	72·4	72·0	71·2	72·3	74·9	76·4	78·5	79·4	79·8	79·8	79 8
24	74·3	73·6	73·0	72·5	71·7	71·5	71·4	72·5	73·4	76·2	77·8	78·2	79·3	79·7	79 2
25	73·3	72·8	71·8	71·5	70·8	70·5	70·5	71·4	73·8	75·0	76·4	77·5	78·4	78 8	78·7
26	71·4	71·4	70·8	70·0	70·3	70 4	70·0	70 5	74·4	75·8	77·4	79·1	80·0	80 3	80·4
27	71·9	71·7	72·9	72·8	72·5	71·2	70·6	71 2	74 0	76·4	79·5	81·4	82·2	82·8	82 8
28	71·9	72·1	72 8	72·0	71·3	70.6	70·8	71·6	74·5	77·8	80·2	82·6	84·0	84 3	83·9
Mean . .	73·2	72.7	72·3	72 0	71·4	71·0	**70·6**	71·3	74·0	76·2	78·4	80·0	80·9	81·2	**81·3**
Variation .	−2·6	−3·1	−3·5	−3·8	−4·4	−4·8	**−5·2**	−4·5	−1·8	+0·4	+2·6	+4·2	+5·1	+5·4	**+5·5**
Mean in °C .	22·9	22·6	22·4	22 2	21·9	21·7	**21·4**	21·8	23 3	24·6	25·8	26·7	27·2	27·3	**27 4**
Variation in °C. .	−1·4	−1·7	−1·9	−2·1	−2·4	−2 6	**−2·9**	−2·5	−1·0	+0·3	+1·5	+2·4	+2·9	+3 0	**+3·1**

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JANUARY. (IN DEGREES FAHRENHEIT.)

Hours.									Mean.		Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	°F	°C	Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
83·4	81·6	79·8	77·8	77·4	77·5	77·0	76·5	76·0	78·3	25·7	14 15	**89·7**	0 42	72·8	1
84·3	82·4	80·8	79·3	78·6	78·0	77·6	76·8	75·4	**78·8**	**26·0**	12 54	88·1	2 56	73·8	2
84·1	82·4	80·0	78·2	77·6	77·4	76·6	75·5	74·7	77·9	25·5	12 42	85·7	2 52	72·8	3
82·5	80·8	78·8	77·4	76·5	75·7	75·0	74·3	72·8	76·8	24·9	12 40	85·6	6 38	71.5	4
87·2	86·2	83·3	80·3	78·2	77·0	76·4	76·0	75·3	78·0	25·6	15 18	87·4	6 52	71·4	5
85·6	84·5	82·5	8)·8	79·6	78·6	78·2	78·0	77·2	78·6	25·9	13 8	**87·0**	6 48	72·4	6
82·5	81·4	80·8	78·8	78·5	77·8	77·3	77·0	76·8	78·5	25·8	13 52	83·6	4 4	75·0	7
81·6	80·9	79·4	78·5	78·2	77·4	76·5	76·3	75·7	77·6	25·3	14 32	82·2	6 55	73·7	8
80·4	79·2	77·8	77·0	76·6	76·3	75·3	75·0	74·2	76·7	24·8	12 32	81·7	6 25	72·2	9
78·9	77·5	76·0	75·2	75·2	74·7	74·2	73·0	72·2	75·1	23·9	14 26	80·1	7 10	71·8	10
79·7	78·7	77·3	76·4	76·2	75·3	74·2	72·9	72·3	74·8	23 8	13 55	80·7	6 32	69·4	11
81·5	80·3	78·5	77·3	76·8	76·1	75·4	74·2	73·3	75·3	24·1	12 24	82·6	5 10	69·3	12
82·8	82·0	80·2	78·3	77·3	76·4	75·4	74·1	73·4	75·7	24·3	15 35	83·6	6 44	68·4	13
83·5	82·2	80·4	78·8	77·8	76·8	75·8	75·6	75·2	76·7	24·8	12 46	85·8	6 15	69·7	14
81·9	80·7	78·8	77·5	76·7	76·3	75·6	74·7	74·0	76·5	24·7	13 2	84·2	6 40	70·8	15
84·2	81·5	79·6	78·2	77·7	77·1	75·6	76·1	75·0	76·7	24 8	12 12	84·6	6 42	70.2	16
84·2	83·0	81·3	79·6	79·0	77·8	76·4	75·4	74·8	77·1	25·2	13 55	84·9	6 54	70·8	17
82·4	81·3	79·3	78·4	78·0	76·7	75·0	74·3	74·6	76·8	24·9	13 56	84·5	6 42	70·9	18
83·0	81·2	79·3	77·6	77·4	76·8	75·5	74·6	75·4	76·9	24·9	14 30	84·8	5 14	70·3	19
84·3	82·3	80·4	78·7	77·6	76·3	75·5	74·4	73·6	77·1	25·1	14 52	85·6	7 4	70·2	20
82·0	80·8	79·3	77·8	77·2	76·1	75·4	73·8	74·6	76·4	24·7	14 50	82·8	7 6	70·3	21
82·1	81·0	79·4	77·9	77·4	76·9	76·2	74·3	73·0	76·4	24·7	14 28	82·9	6 50	71·3	22
80·5	79·6	78·3	76·6	76·0	76·0	74·4	73·3	72·0	75·4	24·1	13 58	81·5	7 16	69·8	23
79·5	78·8	77·5	76·5	75·0	73·8	72·6	72·0	71·6	74.3	23·5	15 24	80·4	6 52	70·2	24
79·3	77·8	76·2	74·6	74·4	74·2	73·3	72·3	71·5	74·4	23·6	13 35	80·5	6 55	69·8	25
78·5	77·4	76·3	74·8	74·8	74·4	73·8	72·6	71·7	73·4	23·0	14 35	79·5	6 30	67·8	26
80·8	80·3	78·4	77·3	76·5	75·3	74·3	73·5	73·7	74·7	23·7	15 14	81·7	6 25	68·1	27
81·3	79·8	78·3	77·4	77·2	76·8	76·1	74·8	73·8	75·9	24·4	14 0	82·6	7 5	69·9	28
80·1	78·6	76·6	75·4	74·7	74·3	73·3	71·5	70·6	74·8	23 8	14 8	80·8	6 2	69·4	29
78·7	78·2	76·0	74·6	74·3	73·5	72·4	70·6	69·3	73·1	22·8	14 40	79·2	7 15	68·3	30
79·5	78·7	77·3	75·6	75·0	74·3	73·7	72·6	72·5	**72·7**	**22·6**	15 45	79·6	5 25	**65·2**	31
81·9	80·7	79·0	77·5	76·9	76·2	75·3	74·4	73·7	76·2	24·6					Mean.
+5·7	+4·5	+2·8	+1·3	+0·7	0·0	−0·9	−1·8	−2·5							Variation.
27·7	27·1	26·1	25·3	24·4	24·6	24·1	23·6	23·2							Mean in °C
+3·1	+2·5	+1·5	+0·7	+0·3	0·0	−0·5	−1·0	−1·4							Variation in °C

FEBRUARY.

81·4	80·0	78·4	76·8	76·4	75·8	75·0	73·5	73·3	74·9	23·9	14 28	82·6	6 32	68·2	1
81·5	79·6	77·6	76·5	76·0	75·8	75·5	74·1	73·5	76·3	24·6	14 36	82·0	6 50	71·3	2
81·5	80·0	77·8	76·7	75·8	75·2	74·9	74·5	74·3	75·9	24·3	14 38	82·5	6 20	69·9	3
80·0	78·3	76·6	75·6	75·1	74·3	73·5	72·6	71·3	74·0	23·0	14 50	80·2	7 2	**67·3**	4
81·4	79·5	78·0	76·4	75·6	75·3	74·5	74·0	73·2	74·9	23·8	12 35	**84·8**	7 10	67·4	5
82·8	81·6	80·0	78·2	77·3	75·8	75·0	74·4	73·8	75·6	24·2	15 28	83·0	5 10	68·9	6
83·5	82·2	80·4	78·8	77·8	77·3	76·8	75·8	74·9	**77·2**	**25·1**	15 4	84·0	6 55	71·2	7
79·5	78·5	76·5	75·0	74·5	73·8	73·4	72·4	71·4	75·3	24·1	15 32	79·7	6 34	71·3	8
79·5	78·6	77·3	75·8	75·5	75·6	75·6	75·3	73·5	**73·9**	**23·3**	14 28	80·6	4 58	67·4	9
80·3	79·4	77·8	77·1	76·8	76·2	74·8	74·0	73·4	75·2	24·0	13 0	82·4	5 20	68·7	10
81·6	80·6	79·2	78·2	78·4	77·6	76·7	75·7	74·7	76·4	24·7	14 53	83·6	6 52	69·1	11
82·6	81·3	79·4	77·7	77·4	76·6	76·3	75·4	74·5	76·7	24·8	14 0	83·8	6 20	69·8	12
81·7	80·6	79·0	77·4	76·9	76·3	75·7	75·4	74·7	76·4	24·7	14 40	83·3	5 0	70·3	13
82·5	81·0	79·4	78·3	77·8	77·5	77·3	76·5	75·4	77·0	25·0	14 37	84·0	6 30	71·0	14
81·6	80·5	79·4	78·1	77·6	77·2	76·5	75·1	75·5	77·2	25·1	12 0	84·6	3 12	71·9	15
82·3	81·4	78·7	77·5	77·3	76·6	76·2	75·5	75·0	77·2	25·1	14 0	83·6	6 30	72·1	16
80·7	80·1	78·4	78·9	76·6	76·4	76·3	75·5	75·1	76·5	24·7	13 10	82·5	6 40	71·0	17
80·3	79·4	77·8	76·5	75·8	75·4	75·2	74·3	73·4	75·9	24·4	12 30	81·6	6 50	71·2	18
80·6	79·7	77·8	76·1	75·6	74·5	74·1	72·7	72·5	75·4	24·1	15 10	81·2	6 42	70·0	19
81·6	81·4	79·5	77·7	76·8	76·3	75·5	75·0	73·5	75·4	24·1	16 24	81·8	6 16	69·2	20
81·0	80·0	78·3	76·8	76·2	75·4	75·0	74·5	73·6	75·7	24·3	13 42	82·0	6 40	70·2	21
79·9	79·4	77·9	76·4	76·2	75·8	75·6	74·8	74·3	75·	24·2	14 12	80·7	6 40	70·2	22
79·4	78·4	77·0	75·6	75·2	75·1	74·6	74·4	74·1	75·5	24·2	14 22	81·0	7 0	70·8	23
78·4	77·3	76·0	75·0	74·9	74·6	74·5	73·9	73·5	75·1	23·9	13 26	80·0	6 16	71·0	24
78·4	76·8	75·3	74·5	74·3	73·4	72·8	72·5	72·4	74·2	23·4	13 58	79·6	6 40	70·3	25
80·3	79·8	78·4	76·8	76·2	75·6	75·4	74·0	73·2	75·0	23·9	13 18	80·8	3 38	69·4	26
82·4	82·3	80·0	77·8	77·0	76·4	75·4	73·8	72·3	76·3	24·6	13 25	83·5	6 10	70·3	27
83·4	82·4	80·5	78·8	78·5	77·8	77·3	75·8	75·2	77·1	25·1	13 14	84·6	5 45	70·3	28
81·1	80·0	78·3	76·9	76·4	75·8	75·3	74·5	73·8	75·8	24·3					Mean.
+5·3	+4·2	+2·5	+1·1	+0·6	0·0	−0·5	−1·3	−2·0							Variation.
27·3	26·7	25·7	24·9	24·7	24·3	24·1	23·6	23·2							Mean in °C.
+3·0	+2·4	+1·4	+0·6	+0·4	0·0	−0·2	−0·7	−1·1							Variation in °C

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MARCH. (IN DEGREES FAHRENHEIT.)

Date.	Hours.															
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	74·2	73·1	71·9	71·5	72·2	71·7	70·9	72·4	77·0	81·8	84·5	86·0	84·9	84·0	84·5
2	74·3	74·6	74·4	74·2	72·5	71·7	72·6	74·2	76·0	78·3	79·6	80·4	81·3	82·0	82·0
3	74·6	74·2	72·8	72·0	71·4	71·4	71·4	72·8	74·4	75·6	78·4	79·5	80·0	80·4	80·6
4	73·2	72·4	72·4	71·8	71·4	71·0	70·6	71·8	74·7	77·0	79·2	79·6	79·5	80·1	80·0
5	71·9	71·9	72·4	71·8	71·4	71·6	69·5	70·8	74·3	77·5	79·0	80·7	82·5	83·1	81·6
6	70·7	69·9	69·2	68·5	68·0	67·6	68·0	70·6	74·4	76·6	78·4	79·4	79·7	80·5	80·6
7	72·4	72·6	72·5	72·1	70·8	70·5	70·4	71·6	73·6	75·0	77·4	78·6	79·6	80·4	81·2
8	74·8	74·4	74·3	74·4	74·5	73·8	73·6	74·4	75·3	77·5	79·6	80·4	81·4	81·8	82·3
9	74·8	74·0	73·6	73·5	72·8	72·6	72·2	73·1	75·1	77·6	80·6	81·5	82·3	82·6	82·8
10	73·4	74·2	73·2	72·6	72·5	72·4	73·0	74·0	75·2	76·7	78·5	79·6	80·6	81·4	82·3
11	73·9	75·3	75·5	74·5	74·3	74·0	74·3	75·1	76·9	78·4	81·5	83·2	83·6	84·5	84·5
12	75·4	75·3	75·0	74·8	73·8	72·5	72·2	74·0	77·2	78·8	82·2	82·6	83·1	83·4	83·5
13	75·8	75·5	75·0	74·5	73·5	73·0	72·6	73·8	75·9	77·5	79·5	81·7	82·6	82·8	82·6
14	72·9	72·4	73·3	73·2	72·9	71·6	71·8	73·4	76·3	77·9	79·7	80·8	81·5	82·0	82·1
15	73·1	72·3	71·8	71·2	70·7	70·4	70·8	72·5	75·2	77·2	78·9	80·0	80·4	81·0	81·2
16	74·5	75·2	75·0	74·5	73·5	72·7	72·5	73·9	77·7	80·4	83·3	85·6	86·6	85·5	83·5
17	77·5	77·4	76·5	76·5	76·4	76·4	75·7	76·5	79·0	81·0	82·7	83·6	83·8	83·3	84·0
18	78·3	78·2	77·8	76·7	76·7	76·6	76·6	76·6	79·6	82·8	83·9	84·0	84·4	84·4	83·4
19	78·5	78·4	78·0	77·6	77·5	76·8	77·0	78·2	79·3	80·5	82·0	82·6	82·8	82·6	82·6
20	77·4	76·8	75·7	76·2	76·3	76·0	76·2	76·8	79·6	80·9	81·8	82·7	83·5	83·8	84·3
21	77·3	76·8	76·6	76·2	75·5	75·9	75·5	76·9	79·2	80·9	82·9	83·8	84·4	85·1	85·3
22	78·1	77·4	77·5	76·7	75·4	74·9	74·8	77·0	80·2	81·8	83·2	84·0	84·5	85·3	84·9
23	77·5	77·2	76·4	76·2	75·4	74·5	74·0	75·6	78·4	80·7	81·8	82·3	83·3	83·9	83·6
24	76·5	75·8	75·3	74·4	74·3	74·2	75·1	76·7	79·0	80·3	81·4	82·1	83·0	83·8	83·5
25	78·8	78·7	78·6	78·4	77·9	77·6	77·3	78·4	79·6	80·6	81·6	82·8	83·3	83·5	82·7
26	77·4	77·3	77·2	77·2	77·2	77·3	77·3	77·7	79·3	80·4	81·4	82·0	82·0	82·7	81·8
27	77·3	77·0	76·7	76·5	76·5	76·5	76·6	77·1	78·3	79·3	81·6	81·4	82·7	82·7	83·1
28	77·6	77·4	77·3	76·9	76·1	75·6	75·8	77·0	80·3	81·7	82·4	82·7	83·2	83·1	83·5
29	77·7	77·5	77·3	76·8	76·0	76·2	76·5	78·0	80·1	81·0	82·1	83·3	83·7	84·0	84·1
30	77·7	77·5	77·4	77·2	76·7	76·5	76·4	78·1	80·0	81·0	82·3	82·9	84·2	84·7	84·8
31	78·8	78·7	78·2	77·8	76·9	76·6	77·5	79·1	82·1	84·5	86·4	**87·4**	86·9	86·5	86·5
Mean .	75·7	75·5	75·1	74·7	74·2	73.9	**73·8**	75·1	77·5	79·4	81·2	82·2	82·8	**83·1**	83·0
Variation .	—2·5	—2·7	—3·1	—3·5	—4·0	—4·3	**—4·4**	—3·1	—0·7	+1·2	+3·0	+4·0	+4·6	**+4·9**	+4·8
Mean in °C .	24·3	24·2	23·9	23·7	23·4	23·3	**23·2**	23·9	25·3	26·3	27·3	27·9	28·2	**28·4**	28·3
Variation in °C .	—1·4	—1·5	—1·8	—2·0	—2·3	—2·4	**—2·5**	—1·8	—0·4	+0·6	+1·6	+2·2	+2·5	**+2·7**	+2·6

APRIL.

1	79·4	79·4	79·4	79·1	79·0	78·5	78·7	80·3	81·6	82·2	83·2	82·8	83·2	84·8	84·9
2	79·8	79·5	79·8	79·4	79·0	79·2	79·7	81·0	82·8	84·3	85·6	85·3	84·6	86·0	86·1
3	78·0	77·5	77·0	76·6	76·6	76·3	**76.2**	78·8	81·6	83·4	86·3	86·3	86·8	87·0	86·3
4	80·1	79·8	79·5	78·8	77·7	77·1	77·6	79·7	83·2	84·5	86·4	87·2	88·0	88·2	87·9
5	78·5	78·0	77·5	77·2	77·3	77·5	**78·6**	80·5	83·5	85·2	86·3	86·8	87·4	87·1	87·2
6	78·6	78·4	78·4	78·4	78·3	78·7	79·6	80·8	83·5	84·4	85·3	85·6	86·4	86·5	86·4
7	79·9	79·0	78·2	78·0	78·3	79·1	**79·1**	80·8	82·6	83·7	84·5	84·9	85·3	85·6	85·7
8	80·7	80·6	79·2	80·1	79·8	79·5	79·8	81·3	83·5	84·9	85·6	85·7	86·6	86·5	86·5
9	79·5	79·4	79·0	78·6	78·4	78·2	78·3	80·5	82·4	83·5	84·0	85·5	86·0	86·5	86·4
10	79·6	79·5	79·3	78·5	78·0	78·4	78·6	80·2	81·8	83·4	84·7	86·0	87·0	87·6	87·6
11	81·4	80·4	80·6	80·6	79·4	79·3	80·5	82·6	84·0	85·5	86·4	86·5	87·2	88·1	88·0
12	80·1	80·2	79·6	79·5	79·4	79·2	79.0	80·4	83·3	85·7	86.3	86·7	87·0	87·4	87·0
13	82·5	82·2	81·5	81·4	81·3	81·2	81·5	83·0	86·2	87·7	89·8	89·8	89·5	89·4	89·0
14	81·9	81·4	80·7	81·4	80·5	80·3	80·6	82·8	84·5	85·6	86·3	87·4	88·6	88·6	88·6
15	82·8	82·4	81·6	81·4	80·3	79·8	80·8	82·6	84·1	85·2	86·4	86·6	87·6	88·4	88·6
16	81·5	81·1	80·5	80·3	79·5	78·8	79·0	82·0	83·8	85·4	86·7	87·3	88·0	88·6	88·5
17	81·5	81·3	80·6	80·5	80·4	80·5	81·5	82·8	84·7	86·2	86·6	87·2	87·5	87·5	88·1
18	81·9	82·6	81·4	80·8	80·2	79·5	80·0	82·7	85·3	86·4	87·0	87·6	88·3	88·8	88·7
19	82·7	83·2	83·4	83·2	82·8	82·8	83·3	84·2	85·5	87·0	88·0	88·5	88·8	89·9	90·8
20	84·6	84·5	83·6	82·5	82·4	81·8	82·2	84·7	87·7	90·5	91·4	91·5	92·4	**92·5**	92·0
21	84·0	84.1	83·5	82·8	82·4	81·6	81·7	83·5	86.3	86·6	88·0	88·8	88·6	89·2	89·1
22	82·5	82·2	81·6	81·0	81·0	80·7	81·7	83·6	85·5	87·0	88·3	88·8	89·4	99·4	89·3
23	81·5	81·2	81·5	81·6	80.3	80·2	81·4	82·8	85·2	86·6	87·3	88.2	89·2	90·0	89·8
24	82·5	83.0	83·5	83·4	82·8	82·5	82·8	84·6	86·2	87·2	87·5	88·3	88·6	88·8	89·2
25	82·9	83·4	83·5	83·6	83·4	83·2	83·4	84·4	86·0	86·8	88·2	89·5	89·3	90·2	90·3
26	84.2	83·2	82·5	82·3	81·8	82·6	83·2	84·5	86·4	87·4	88·6	89·4	89·9	90·4	91·3
27	84.5	84·5	83·7	82·9	82·5	82·5	82·8	85·1	88·4	90·3	90·6	91·0	92·3	91·6	91·6
28	83·6	83·2	83·6	82·7	83·2	83·2	83·8	85·0	87·4	89·3	90·4	91·2	91·0	90·6	89·7
29	82·9	82·7	85·6	82·5	82·1	81·6	82·0	83·4	84·8	86·3	87·2	87·4	87·5	88·1	88.1
30	82·5	82·7	84·0	82·6	82·4	82·3	82·6	84·6	86·2	87·3	87·8	88·7	88·7	88·7	88·4
Mean .	81·5	91·3	81·0	80·7	80·3	**80·2**	80·7	82·4	84·6	86·0	87.0	87·5	88·0	**88.4**	88·4
Variation .	—2·6	—2·8	—3·1	—3·4	—3·8	**—3·9**	—3·4	—1·7	—0·5	+1·9	+2·9	+3·4	+3·9	**+4·3**	+4·3
Mean in °C. .	27·5	27·4	27·2	27·1	26 8	**26·8**	27·1	28·0	29·2	30 0	30 6	30·8	31·1	**31·3**	31·3
Variation in °C. .	—1·4	—1·5	—1·7	—1·8	—2·1	**—2·1**	—1·8	—0·9	+0·3	+1·1	+1·7	+1·9	+2·2	**+2·4**	+2·4

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MARCH. (IN DEGREES FAHRENHEIT.)

Hours.										Mean.		Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21 - 22	22—23	23—24		°F	°C	Time.	Mag.	Time.	Mag.	
												H. M.		H. M.		
84.4	82·5	80·8	79·0	78·3	77·6	77·2	75·3	74·4		77·9	25·5	11 20	86·6	6 45	70 7	1
81·6	81·4	79·0	77·6	76·8	75·8	74·8	74·7	73·4		76·9	24·9	14 18	82·7	5 20	71·5	2
80·4	79·8	78·2	76·6	75·2	74·2	74·5	72·6	72·7		75·6	24 2	14 32	81·7	6 4	70·6	3
79·6	80·2	79·0	76·7	76·2	75·0	74·0	73·8	72·8		75·5	24·2	14 28	80·6	6 30	70·4	4
80·6	79·5	77·9	76·3	75·6	75·4	74·5	73·5	72·8		75·7	24·3	13 0	83·6	6 40	69·3	5
80·3	79·6	78·0	76·0	74·8	73·7	73·4	72·2	71·4		**74·2**	**23·4**	13 50	80·8	5 32	**67.5**	6
81·1	81·0	79·5	77·4	76·5	75·5	74·2	74·8	75·0		75·6	24·2	14 20	81·7	6 20	69.9	7
81·8	81·3	79·5	77·5	76·6	76·3	75·7	75·7	75·4		77·2	25·1	14 36	82·6	5 40	73·5	8
82·2	81·4	79·9	78·0	77·2	75·6	74·9	74·4	73·6		76·9	24·9	14 30	83·1	6 20	72·1	9
82·0	81·4	80·4	78·8	78·4	78·0	77·5	76·0	74·5		76·9	24·9	14 18	82·6	5 48	72·3	10
84·3	83·5	81·8	80·4	79·6	79·0	77·5	76·4	75·8		78·7	25·9	14 28	85·0	1 16	73·7	11
82·8	82·3	80·5	78·8	77·6	76·4	76·2	76·0	75·4		77·9	25·5	14 48	83·6	6 12	72·1	12
82·4	81·7	80·4	78·4	77·3	76·3	74·5	73·8	73·7		77·3	25·2	13 36	83·1	6 30	72·5	13
82·1	81·0	79·4	77·2	76·5	75·6	75·4	74·6	73·9		76·6	24·8	13 35	82·6	5 40	71·4	14
80·3	79·5	78·8	77·6	77·3	77·0	76·6	75·6	74·5		76·0	24·4	13 56	82·1	6 5	70·1	15
83·3	82·6	82·3	80·2	79·2	78·3	77·9	77·6	77·5		78·9	26·1	12 14	**87·6**	6 32	72·4	16
82·7	82·2	81·8	81·0	80·6	80·4	79·5	78·7	78·8		79·8	26·6	12 22	85·3	6 30	75·4	17
83·8	83·8	81·6	80·3	79·8	79·8	79·4	78·6	78·6		80·2	26·8	12 40	84·9	6 50	75·7	18
82·3	81·8	81·4	79·9	79·3	78·6	77·8	77·9	77·5		79·6	26·4	12 32	83·6	6 12	76·4	19
84·1	83·4	82·0	80·3	79·4	79·1	78·3	77·5	77·5		79·6	26·4	12 34	84·5	2 34	75·3	20
84·9	83·9	82·6	81·0	80·3	79·5	79·2	78·7	78·6		81·0	26·7	14 10	85·6	5 12	75·0	21
84·4	83·7	82·8	81·6	81·2	80·5	80·0	78·6	78·2		80·3	26·8	13 32	85·6	6 22	74·5	22
83·8	82·2	80·0	79·2	78·6	78·1	77·6	77·1	76·7		78·9	26·1	13 50	84·6	6 50	73·7	23
83·4	83·0	82·0	80·2	79·6	79·4	79·5	79·4	79·3		79·2	26·2	13 34	84·0	5 12	74·0	24
82·1	80·2	79·4	79·0	78·7	78·4	78·2	77·7	77·6		79·6	26·4	13 36	84·4	6 22	77·1	25
80·3	79·7	78·7	78·3	77·8	77·5	77·5	77·4	77·4		78·9	26·1	14 2	83·1	2 22	76·9	26
82·2	81·5	80·6	79·5	79·2	78·5	78·3	78·3	78·2		79·1	26.2	14 56	83·8	3 58	76·3	27
82·8	82·2	81·1	79·4	78·7	78·4	78·3	78·3	78·2		79·5	26·4	14 45	84·3	6 5	75·4	28
83·9	83·0	81·8	79·9	79·5	79·2	78·7	78·5	78·3		79·9	26·6	14 4	84·5	4 46	75·8	29
84·6	83·8	82·5	81·3	80·7	80·5	80·2	79·6	79·3		80·4	26·9	14 10	85·4	6 8	76·0	30
85·2	84·4	83·3	81·6	81·2	80·8	80·6	80·3	79·6		**81·7**	**27·6**	13 40	87·5	6 10	76·3	31
82·6	81·9	80·5	79·0	78·3	77·7	77·2	76·6	76·2		78·2	25 7					Mean.
+4·4	+3·7	+2·3	+0·8	+0·1	—0·5	—1·0	—1·6	—2·0								Variation.
28·1	27·7	26·9	26·1	25·7	25·4	25·1	24·8	24·6								Mean in °C
+2·4	+2·0	+1·2	+0·4	0·0	—0·3	—0·6	—0·9	—1·1								Variation in °C

APRIL.

84·5	84·0	82·4	81·2	80·8	80·5	80·5	80·4	80·2	**81·3**	**27.4**	14	50	85·3	6	10	78·0	1
86·1	85·0	83·6	81·6	81·4	80·4	79·6	79·3	78·6	82·0	27·8	10	20	86·5	5	0	78·5	2
86·0	85·4	84·0	82.6	82·5	82·4	81·2	80·6	80·4	81·7	27·6	11	22	87·4	6	15	**75·7**	3
87.8	86·4	84·6	82·7	82·3	81·5	80·6	79·6	79·3	82·5	28·1	13	18	88·6	5	35	77·0	4
87.0	85·5	84·2	82·8	82·0	81·0	80·6	80·3	80·0	82·2	27·9	13	10	88·0	3	50	77·1	5
85.8	85.0	83·8	82·3	81·5	81·0	80·6	80·5	80·4	82·1	27·8	13	26	86·8	3	56	78·0	6
85.6	85.2	83·8	82·5	82·2	81·6	81·5	81·4	81·1	82·1	27·8	15	14	86·3	4	0	77.8	7
86.2	85.0	83·8	82·4	81·6	81·3	80·5	80·0	79·8	82·6	28.1	12	50	87·2	6	2	79·4	8
86.5	85.4	83·5	82.2	81·4	81·3	80·4	79·6	80·0	82·0	27·8	12	58	86·6	6	0	77.6	9
87.6	86.8	85.6	84·2	83·6	83·0	82·5	82·0	81.6	82 8	28·2	14	15	88·0	4	56	77·8	10
87.2	85.6	84·2	82·5	82·0	81·6	81·5	81·3	80·6	83·2	28·4	14	20	88·6	5	30	78·6	11
87.1	86.5	85·0	83·6	83·2	82·6	82·5	82·6	82·6	83·2	28·4	12	30	88·0	6	2	78·5	12
88.6	87.5	86·3	84·8	84·3	83·6	83·4	82·8	82·5	85·0	29·4	11	30	89·9	5	56	81·0	13
88.5	87.0	85·6	84·3	83·8	83·4	83·3	83·5	83·4	84·3	29·1	14	8	89·5	6	2	79·7	14
88.7	87.5	86.0	84·3	83·5	83·0	82.7	82·4	82·0	84·1	28·9	15	42	89·4	5	32	79·7	15
88.4	87.7	86·0	84·0	83.2	82·5	82·4	81·8	81·5	83·7	28·7	13	42	89·0	6	0	78·5	16
87.5	86.5	84·8	83·4	82·8	82·5	82·4	82·2	82·0	83·8	28·8	14	20	88·3	4	30	80·1	17
88.6	88.7	87·6	85·8	84·6	84·4	84·2	84·0	83·5	84·6	29·3	14	4	89·6	5	58	79·3	18
90.6	89.6	89·0	88·3	87.4	86·4	85.4	85·0	85·2	86·3	30·2	14	48	91·5	0	25	82.5	19
91.7	90.8	89·6	87·7	87·0	86·3	84.4	84·2	84·2	**87·1**	**30 6**	13	12	**93·5**	5	48	81·5	20
89.4	88.8	87.5	85·4	84·6	84·3	83·8	83·4	82·8	85·4	29·7	13	58	89·8	6	2	81·4	21
89.3	88.6	87·5	85·7	84·7	84·3	83·6	83·0	81·8	85·0	29·4	13	8	**90.1**	5	30	80·4	22
89.9	89.4	87·3	86·3	85·3	84·0	83·0	82.5	82·4	84·9	29·4	13	2	90·5	5	40	80·0	23
88.7	88.0	86·5	85·3	84·5	84·4	84·0	83·5	82.7	85·4	29·7	14	30	89·6	6	0	82·3	24
90.8	89.5	88·3	86·5	85·7	85·5	85·6	85·1	84·7	86·3	30·2	15	40	91·6	0	20	82·5	25
91.2	89.7	88·4	86·6	85·3	84·8	85.0	84·7	84·5	86·2	30·1	14	34	91·5	5	40	81·4	26
91.5	90.0	89·6	87·6	85·8	84·8	84·5	84·5	84·3	87·0	30·6	12	52	92·6	4	36	82·4	27
89.3	87.7	86·8	85·8	85·0	84·2	83·6	83·3	83·2	86·1	30·1	12	32	91.8	3	0	82·5	28
87.8	87.0	86·3	84·7	84·4	83.8	83·5	83·0	82.7	84·7	29·3	14	20	88·8	5	22	81·5	29
87.8	87.4	86·0	84·5	83·8	83.4	82·8	82·5	82·0	84·9	29·4	12	36	86·6	23	56	81·6	30
88·2	87·2	85.9	84·4	83·7	83·1	82·7	82·3	82·0	84·1	28·9							Mean.
+4·1	+3·1	+1·8	+0·3	0·4	—1·0	—1·4	—1·8	—2·1									Variation.
31·2	30·7	29·9	29·1	28·7	28·4	28·2	27·9	27·8									Mean in °C
+2·3	+1·8	+1·0	+0·2	—0·2	—0·5	—0·7	—1·0	—1·1									Variation in

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY. (IN DEGREES FAHRENHEIT.)

Date.	Hours.															
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	81·5	80·6	80·2	80·3	80·8	80·7	81·6	83·5	84·6	85·7	86·6	86·8	87·6	87·7	87·6
2	82·4	82·5	82·5	82·3	81·8	81·5	82·3	82·7	85·2	86·4	86·8	87·6	88·5	88·7	89·3
3	82·4	81·8	81·5	81·0	80·7	80·5	81·4	83·4	85·4	87·0	88·2	88·2	88·7	89·7	89·3
4	81·8	81·4	51·2	81·3	80·7	**80·1**	80·7	82·5	85·4	86·8	88·2	88·6	89·2	89·4	89·6
5	82·6	82·4	81·9	81·7	81·5	81·3	81·4	83·1	85·1	86·7	87·5	88·7	89·5	89·4	89·4
6	82 8	82·6	82·5	82·2	82·0	81·5	81·8	83·5	85·4	86·5	87·0	87·6	88·5	88·7	89·3
7	83·3	82·9	82·5	82·0	81·4	81·0	82·2	83·6	86·3	87·3	88·6	89·5	89·7	90·3	89·6
8	83·6	83·5	83·4	83·3	83·1	83·0	83·5	84·6	86·2	87·4	88·6	89·6	90·0	90·0	89·8
9	83·7	83·5	83·4	83·3	83·1	82·9	83·3	84·5	86·4	87·5	88·5	89·3	89·5	89·6	89·5
10	84·3	83·7	83·5	83·5	83·2	83·3	83·6	85·2	86·6	87·7	88·8	89·5	90·1	90·5	90·5
11	84·2	84·3	83·6	83·4	82·8	82·6	83·3	84·4	85·8	86·8	88·0	89·0	89·3	90·3	90·4
12	84·3	83·7	83·1	83·3	83·2	82·7	83·1	84·3	85·5	86·7	87·6	88·4	89·6	90 0	90·5
13	84·5	84·2	83·7	83·5	83·6	83·5	84·2	85·3	86·7	88·2	88·8	89·5	90 2	90·6	90·6
14	84·7	84·5	84·4	84·0	83·6	83·7	84·4	85·6	87·0	88·5	89·5	89·8	90·4	90·5	90·6
15	83·6	83·3	82·8	82·6	82·4	82·4	83·2	84·6	86·4	87.4	88·5	89·5	89·6	89·6	90·0
16	83·0	82·7	82·5	82·5	82·3	82·2	82·8	84·1	85·4	86·7	88·1	88·8	89·4	89·5	90·1
17	82·8	82·6	82·4	82·0	80·8	80·7	81·7	83·4	85·1	86·6	87·4	88·4	89·2	89·4	89·2
18	83·0	82·7	82·6	82·5	82·3	81·8	83·0	84·3	85·7	86·9	87·8	88·7	89·2	89·6	89·8
19	83·0	82·6	32·5	82·4	82·0	82·0	82·8	84·2	85·7	87·1	88·2	88·6	89·2	89·5	89·5
20	84·0	83·5	83·5	83·0	82·8	83·0	83·8	84·7	85·3	87·4	88·3	89·1	89·4	89·3	89·6
21	83·6	83·4	83·2	82.9	82·7	82·4	83·3	84·2	85·3	86·6	88·0	89·2	89·6	90·5	90·0
22	84·4	84·0	83·8	83·5	83·3	82·7	83·6	85·1	86·5	87·5	89·0	89·7	90·0	90·6	90·7
23	84·5	84·2	83·5	83·4	83·4	83·4	84·0	85·0	86·6	87·7	89·1	89·5	90·2	90·4	90·2
24	84·0	84·0	84·1	84·2	83·6	83·6	84·3	85·6	87·6	89·3	90·3	90·7	90·8	91·0	90·7
25	84·1	83·7	83·5	83·5	83·4	83·3	83·8	85·6	87·8	88·6	89·3	90·0	90·4	90·6	90·7
26	84·0	83·6	83·6	83·5	83·4	83·4	83·7	84·7	86·4	87·5	88·4	89·0	89·8	90·3	90·4
27	84·3	84·3	84·0	83·7	83·4	83·5	84·1	85·2	86·5	87·9	89·0	89·5	90·3	90·4	90·6
28	84·3	84·0	83·6	83·1	83·1	83·2	84·2	85·0	86·4	87·7	88·5	89·4	90·0	90·5	91·4
29	84·4	84·3	84·2	83·8	83·6	83·5	84·3	85·0	86·7	87·9	89·1	90·4	91·3	91·4	91·5
30	84·7	84·6	84·4	84·3	83·6	83·5	84·0	85·5	87·4	88·4	88·4	89·8	91.0	91·2	90·7
31	84·9	84·6	84·7	84·6	84·5	84·0	84·7	86·5	88·0	88·8	90·5	91·3	**91·5**	91·5	91·4
Mean .	83·6	83·3	83·1	82·9	82·6	**82·5**	83·2	84·5	86·2	87·4	88·4	89·2	89·7	90·0	**90·1**
Variation .	—2·3	—2·6	—2·8	—3·0	—3·3	—3·4	—2·7	—1·4	+0·3	+1·5	2·5	+3·3	+3·8	+4·1	+4·2
Mean in °C. .	28·7	28·5	28·4	28·3	28·1	**28·1**	28 4	29·2	30 1	30·8	31·3	31·8	32·1	32·2	**32·3**
Variation in °C.	—1·2	—1·4	—1·5	—1·6	—1·8	—1·8	—1·5	—0·7	+0·2	+0·9	+1·4	+1·9	+2·2	+2·3	+2·4

JUNE,

1	84·7	84·5	84·5	84·4	84·3	84·4	84·7	85·8	87·5	88·5	89·5	90·3	90·7	91·1	91·1
2	83·0	82·7	82·5	82·4	82·5	82·7	83·4	84·4	85·9	87·3	88·2	88·8	90·6	90·4	90·4
3	85·3	85·0	85·0	84·7	84·5	84·5	85·0	86·0	87·7	88·6	89·6	89·6	90·2	90·6	90·7
4	84·9	85·0	84·8	84·8	85·1	85·0	85·5	86·6	87·8	89·2	89·5	90·2	91·0	91·3	91·0
5	85·5	85·6	85·5	85·5	85·5	85·4	85·6	86·6	87·6	89·0	90·0	90·6	90·7	91·3	90·8
6	85·3	85·2	84·8	84·7	84·6	84·5	85·1	86·3	87·6	88·5	89·6	90·2	90·7	91·1	91.1
7	84·7	84·6	84·7	84·4	84·3	84·2	84·8	86·0	87·5	88·5	89·5	90·2	90·6	91·3	91·2
8	85·2	85·1	85·2	85·2	84·8	84·5	85·2	86·3	87·7	88·8	90·1	90·5	91·4	91·3	90·9
9	85·5	85·3	85·2	85·3	85·4	85·2	85·5	86·6	88·3	89·5	90·3	90·9	91·6	**92·3**	91·8
10	85·5	85·3	85·2	85·2	84·9	84·5	84·7	85·8	86·5	87·6	90·3	91·0	91·4	91·4	90·8
11	85·2	84·8	84·6	84·3	83·6	83·7	84·3	85.6	88·2	89·6	90·1	90·2	90·5	90·5	90·3
12	85·0	84·6	84·3	83·7	83·3	83·3	83·6	84·6	87·4	88·5	88·8	89·0	89·5	89·4	89·5
13	84·2	83·6	83·1	81·7	82·0	81·9	82·5	83·0	83·6	84·3	83·7	83·6	84·2	82·0	82·3
14	81·7	81·7	82·0	79·7	79·6	79·6	79·4	79·4	79·6	78·6	77·2	**76·6**	77·7	77·2	76·8
15	79·1	79·2	79·5	79·5	79·6	80·3	80·5	81·4	82·5	83·4	84·6	85·7	85·6	85·6	86·1
16	84·4	84·3	84·0	83·8	83·6	83·5	83·8	85·1	86·4	87·5	88·3	89·2	89·4	89·4	89·2
17	84·6	84·5	84·4	84·3	84·0	83·8	84·2	85·4	86·1	87·4	88·7	89·4	89·7	89·5	90·0
18	85·1	84·8	84·5	84·4	84·2	84·2	84·5	85·7	87·1	87·8	89·0	89·2	90·0	90·6	91·1
19	85·6	85·5	85·3	85·3	85·3	85·2	85·5	85·9	86·7	87·6	88·5	88·2	88·9	90·0	90·2
20	85·6	85·6	85·4	85·2	84·9	85·0	85·3	85·4	85·7	87·1	88·2	88·4	89·3	88·8	88·4
21	85·5	85·4	85·5	85·4	85·3	85·2	84·8	84·9	82·6	81·2	82·8	83·1	84·9	83·8	84·3
22	84·7	84·6	83·7	84·4	84·4	84·4	85·0	85·8	87.3	88·2	89·2	89·5	89·5	89·4	88·5
23	85·0	85·1	84·6	84·5	84·5	84·6	84·9	85·9	86·7	88·0	89·1	89·6	88·8	89·6	89·5
24	85·3	85·1	85·0	84·8	84·6	84·6	85·3	86·3	87·4	88·5	89·3	90·0	89·9	88·7	89·7
25	84·4	84·5	84·5	84·5	84·3	84·2	82·6	83·2	84·1	85·4	87·1	88.1	89·0	89·3	89·4
26	83·6	83·7	83·5	83·5	83·5	83·5	83·6	83·8	84·7	24·5	85·5	86·4	87·5	88·8	88·5
27	84·7	84·6	84·4	84·4	84·2	81·7	82·6	83.5	85·0	85·7	86·5	87·5	88·4	88·7	89·4
28	83·6	83·5	82·6	81·4	81·5	81·6	81·6	81·5	80·6	79·8	79·1	78·6	78·2	78·5	79·7
29	81·4	81·5	81·8	81·8	81·7	81·5	80·8	80·7	79·9	80·3	81·3	80·8	81·3	82·6	83·4
30	79·6	78·8	78·7	79·1	80·0	80·4	80·7	81·2	81·5	80·8	82·8	82·3	82·0	80·8	78·6
Mean .	84·3	84·1	84·0	83·7	83·7	**83·6**	83·8	84·6	85·6	86·3	87·2	87·6	88·1	**88·2**	88·2
Variation .	—1·2	—1·4	—1·5	—1·8	—1·8	—1·9	—1·7	—0·9	+0·1	+0·8	+1·7	+2·1	+2·6	+2·7	+2·7
Mean in °C. .	29·1	28·9	28·9	28·7	28·7	**28·7**	28·8	29·2	29·8	30·2	30·7	30·9	31·2	**31·2**	31·2
Variation in °C.	—0·7	—0·9	—0·9	—1·1	—1·1	—1·1	—1·0	—0·6	0·0	+0·4	+0·9	+1·1	+1·4	+1·4	+1·4

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

MAY. (IN DEGREES FAHRENHEIT.)

Hours.										Mean.		Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24		°F.	°C.	Time.	Mag.	Time.	Mag.	
												H. M.		H. M.		
87·2	86·2	84·5	83·0	82·5	82·4	82·2	82·3	82·4		83·7	28 7	12 53	88·6	3 10	79·9	1
88·7	88·1	86·6	84·6	83·8	83·4	83·0	82·8	82·6		84·8	29·8	12 55	89·7	5 30	81·3	2
88·6	88·0	87·0	85·5	84·5	84·0	83·8	83·4	82·6		84·9	29·4	13 3	89·9	5 20	80·3	3
89·0	87·9	86·5	84·8	84·3	83·6	83·4	83·4	83·3		84·7	29·3	14 32	90·1	5 45	79·8	4
89·3	88·4	86·7	84·9	84·4	84·0	83·5	83·4	83·4		85·0	29 4	12 40	90·0	6 0	80·0	5
89·1	88·4	86·9	85·5	84·4	84·2	84·2	83·6	83·4		85·1	29·5	13 37	89·6	5 15	81·3	6
89·5	88·7	87·6	85·9	85·2	84·6	84·4	84·2	83·8		85·6	29·8	13 28	90·8	5 30	80·7	7
89·7	89·2	87·8	87·3	85·4	84·9	84·6	84·4	84·2		86·1	30·1	14 10	90·8	5 40	82·8	8
89·5	88·9	87·7	86·5	85·9	85·4	85·2	84·6	84·5		86·1	30 1	14 13	90·4	5 10	82·7	9
90·1	89·4	88·0	86·6	86·0	85·5	85·0	84·6	84·4		86·4	30 2	14 2	90·8	5 5	82·9	10
90·0	89·3	88·0	86·2	85·5	85·0	84·8	84·5	84·3		86·1	30 1	14 42	90·9	5 24	82·4	11
90·5	89·5	88·2	86·6	86·0	85·5	85·3	84·8	84·6		86·1	30·1	14 20	90·8	6 2	82·4	12
90·3	89·5	88·4	86·7	86·3	85·8	85·5	85·4	85·1		86·7	30·4	14 50	91·0	5 0	83·3	13
90·1	89·0	87·4	85·7	85·0	84·6	84·4	84·3	83·8		86·5	30·3	15 22	90·8	5 0	83·4	14
89·5	88·7	87·0	85·4	84·7	84·4	84·0	83·5	83·3		85·7	29·8	14 55	90·5	5 2	82·2	15
89·6	88·6	86·6	84·7	84·3	83·6	83·5	83·3	83·0		85·3	29 6	14 37	90·5	5 12	81·8	16
89·4	88·5	87·2	85·5	84·6	84·2	83·6	83·5	83·3		85·1	29 5	13 8	89·8	5 0	80·5	17
89·4	89·0	87·5	85·7	84·8	84·3	83·8	83·4	83·3		85·5	29·7	14 28	90·6	5 40	81·6	18
89·5	89·3	88·0	86·4	85·5	84·8	84·5	84·4	83·8		85·6	29·8	12 58	89·8	5 2	81·5	19
89·7	89·4	88·0	86·4	85·6	85·2	84·6	84·4	83·8		86·0	30·0	14 0	90·6	5 10	82·7	20
89·6	88·5	87·5	86·3	85·7	85·4	84·8	84·6	84·5		85·9	29·9	15 0	90·7	5 40	82·0	21
90·5	89·5	87·9	85·8	85·4	85·4	85·0	84·8	84·8		86·4	30·2	14 0	91·1	5 20	82·5	22
89·5	88·6	87·3	85·7	85·1	84·8	84·0	84·6	84·2		86·2	30·1	13 13	91·2	4 0	83·0	23
90·5	89·7	88·5	86·7	86·0	85·5	85·4	84·8	84·6		86·9	30·5	12 12	91·7	5 10	83·4	24
90·6	89·7	88·2	86·2	85·6	85·3	84·7	84·5	84·4		86·6	30 3	14 54	91·4	5 0	83·1	25
90·0	89·0	87·8	86·5	85·7	85·4	84·8	84·6	84·4		86·2	30·1	14 28	90·6	4 30	83·1	26
90·6	88·5	88·0	85·8	85·0	84·6	84·5	84·4	84·3		86·3	30 2	14 25	91·3	4 10	83·3	27
90·8	89·6	88·3	86·4	85·5	85·5	85·5	85·0	85·0		86·5	30·3	15 20	91·7	4 0	82·9	28
90·8	90·0	88·4	86·6	85·8	85·5	85·4	85·0	84·8		86·8	30·4	13 22	91·7	5 0	83·3	29
90·6	89·6	88·5	86·7	85·3	85·8	85·5	85·4	85·3		86·9	30·5	12 30	91·7	5 55	83·3	30
90·7	89·7	88·5	87·1	86·5	85·6	85·4	85·4	85·2		87·3	30·7	13 42	92·3	5 25	83·6	31
89·8	88·9	87·6	85·9	85·2	84·8	84 5	84·2	84·0		85·9	29·9					Mean.
+3 9	+3·0	+1·7	0·0	—0·7	—1 1	—1·4	—1·7	—1·9								Variation.
32·1	31·6	30·9	29·9	29·6	29·3	29·2	29·0	28·9								Mean in °C
+2·2	+1·7	+1·0	0·0	—0·3	—0·6	—0·7	—0·9	—1·0								Variation in °C.

JUNE.

90·5	89·1	89·9	89·4	89·3	89·4	81·8	81·8	82·3	85·7	29·8	13 23	91·7	22 30	81·6	1
89·9	89·1	88·4	87·4	86·7	86·2	85·6	85·5	85·4	86·2	30·1	12 45	91·6	3 20	82·2	2
89·8	89·3	87·8	86·4	85·7	85·5	85·5	85·3	84·8	87·0	30·6	14 33	91·6	5 15	84·3	3
90·6	89·6	88·0	86·7	86·5	86·3	86·4	86·4	86·0	87·4	30·8	12 56	91·7	5 0	84·7	4
90·3	89·4	88·4	86·8	86·4	85·7	85·6	85·5	85·5	87·5	30·8	13 22	91·5	5 24	85·3	5
90·7	90·0	88·4	87·1	86·4	85·8	85·5	85·4	84·8	87·2	30·7	14 8	91·6	5 34	84·4	6
90·5	89·7	88·6	86·8	86·3	85·8	85·5	85·3	85·3	87·1	30·6	14 20	91·6	5 26	84·0	7
90·7	90·0	88·6	87·0	86·3	86·0	85·7	85·7	85·7	87·4	30·8	14 22	91·6	5 36	84·4	8
91·5	91·2	89·5	88·0	87·4	86·8	85·7	85·6	85·5	87·9	31·1	13 40	92·7	2 40	84·8	9
90·3	89·3	88·3	87·3	86·7	86·4	86·0	85·7	85·5	87·3	30·7	13 50	91·6	4 45	84·3	10
89·3	88·4	87·5	85·3	86·1	85·5	85·4	85·4	85·4	86·9	30·5	12 12	90·8	5 14	83·5	11
89·2	87·8	86·5	85·3	85·2	84·4	84·1	84·4	84·5	86·1	30·1	11 10	90·6	6 38	83·2	12
82·0	81·8	83·0	83·4	83·5	82·6	82·7	82·7	82·3	82·9	28·3	12 35	84·8	4 5	81·3	13
77·5	78·2	78·6	78·6	78·6	79·3	78·8	79·4	79·0	78·9	26·1	2 22	82·5	11 8	76·3	14
86·2	86·3	85·7	85·4	85·2	84·7	84·6	84·6	84·5	83·3	28·5	15 54	86·7	0 10	79·0	15
89·3	88·8	87·0	86·6	86·3	85·7	85·5	85·2	85·2	86·3	30 2	12 40	89·6	5 25	83·1	16
90·2	89·6	89·0	87·4	86·7	86·4	86·2	85·7	85·5	86·8	30·4	13 20	90·5	5 58	83·7	17
91·2	89·8	89·5	88·0	87·1	86·8	86·7	86·1	85·6	87·2	30·7	15 50	91·4	5 32	84·1	18
89·6	88·0	87·5	87·1	86·6	86·3	86·2	85·8	85·7	86·9	30·5	14 42	91·6	4 28	84·9	19
87·5	87·5	87·2	86·6	86·4	85·9	85·6	85·5	85·5	86·5	30 3	14 20	89·7	5 12	84·8	20
83·4	83·4	84·2	34·4	84·8	85·3	85·3	85·3	84·8	84·4	29·1	12 25	86·5	9 24	81·0	21
89·3	89·3	88·0	86·6	85·8	85·6	85·5	85·3	85·2	86·6	30·3	13 8	90·1	2 28	83·2	22
89·1	89·1	88·2	87·2	86·6	86·4	86·0	85·5	85·4	86·8	30·4	12 6	90·6	2 34	84·3	23
89·6	89·3	88·2	87·2	86·4	85·8	85·4	85·1	84·6	86·9	30·5	12 24	90·5	5 44	84·3	24
89·3	88·9	87·8	86·6	86·1	83·3	84·0	83·5	83·6	85·7	29·8	14 40	89·7	6 26	82·3	25
87·4	85·9	85·8	86·2	85·4	85·4	85·3	84.2	84·8	85·2	29·6	14 25	89·5	4 10	83·4	26
89·3	88·1	87·5	86·6	86·3	85·8	85·6	85·5	85·1	85·9	29·9	14 22	89·7	5 25	81·4	27
79·7	80·8	80·3	80·3	80·2	80·3	80·5	80·5	81·0	80·6	27·0	0 18	84·1	13 0	77·5	28
83·3	82·6	82·2	81·2	81·4	81·6	80·8	81·1	81·6	81·5	27·5	14 55	84·1	8 46	79·3	29
77·8	77·4	78·4	79·4	80·4	80·8	79·5	79·3	79·0	80·0	26·7	10 20	83·5	16 44	77·3	30
87·8	87·1	86·4	85·6	85·2	84·8	84·6	84·4	84·3	85·5	29·8						Mean.
+2·3	+1·6	+0·9	+0·1	—0·3	—0·7	—0·9	—1·1	—1·2								Variation.
31·0	30·6	30·2	29·8	29·6	29·3	29·2	29·1	29 1								Mean in °C.
+1·2	+0·8	+0·4	0·0	—0·2	—0·5	—0·6	—0·7	—0·7								Variation in °C

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JULY. (IN DEGREES FAHRENHEIT.)

Date.	Hours.														
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	78·6	75·8	76·6	77·4	78·0	78·4	78·5	79·0	79·5	77·9	79·4	79·8	82·4	80·0	78·5
2	79·6	80·2	80·7	80·5	79·4	79·8	80·5	80·2	80·0	78·6	78·3	77·2	75·5	**75·1**	75·2
3	83·4	83·4	83·5	83·5	83·5	83·4	83·6	83·5	84·4	85·4	86·3	82·9	81·9	82·8	84·4
4	83·4	83·3	83·4	83·3	82·3	82·8	83·3	83·4	83·6	83·8	84·6	85·1	84·8	85·3	85·3
5	79·8	81·2	80·5	80·0	79·4	79·4	78·3	79·2	81·3	81·1	81·6	80·9	79·7	79·4	77·8
6	76·5	77·2	77·4	76·8	76·9	75·8	75·7	76·3	75·7	76·9	78·1	77·8	79·3	79·8	80·3
7	80·5	80·5	80·6	80·7	81·4	80·8	79·1	79·6	79·7	81·0	83·1	84·3	85·5	85·5	84·2
8	82·8	82·5	82·0	82·4	82·5	82·5	82·8	83·4	84·5	85·3	86·2	86·4	84·2	84·0	82·0
9	80·9	81·5	82·3	82·4	82·5	82·5	82·7	83·3	84·2	84·5	83·9	85·6	83·1	81·2	82·1
10	82·2	82·5	81·0	80·8	80·5	81·0	80·0	81·5	81·6	80·9	81·2	82·8	83·2	80·1	79·2
11	82·6	82·7	82·7	82·6	82·3	82·1	82·5	83·3	79·9	78·5	81·5	82·4	83·0	83·4	83·7
12	81·8	82·0	81·7	82·4	82·5	82·5	81·4	81·0	81·7	83·0	84·4	84·5	84·5	83·8	83·3
13	82·5	82·4	82·3	82·3	82·4	82·4	81·7	81·8	82·2	83·7	84·6	83·5	84·2	84·9	85·3
14	81·0	81·3	81·5	82·4	82·0	82·3	81·5	81·7	81·5	81·7	82·4	82·1	81·8	80·8	81·4
15	75·7	76·4	77·2	77·0	77·0	76·2	77·3	77·1	78·3	79·2	80·2	80·1	77·6	77·7	78·1
16	78·5	78·0	77·8	77·5	77·1	76·6	77·1	77·8	79·3	80·1	81·0	80·5	81·9	81·4	80·5
17	81·2	81·4	80·5	80·5	81·1	81·2	81·3	81·4	81·6	82·3	80·4	80·8	81·8	83·3	83·4
18	79·8	79·5	80·6	80·4	79·4	78·6	79·4	80·6	80·6	82·4	83·1	83·6	84·0	84·1	85·0
19	81·4	80·6	79·6	78·3	78·4	78·6	78·7	79·2	80·5	82·0	82·2	79·7	80·8	81·5	81·8
20	79·2	79·4	79·4	79·4	80·1	79·2	78·6	78·9	79·8	81·4	83·2	84·0	84·4	84·6	83·7
21	81·3	81·0	80·7	81·3	81·2	80·2	79·9	80·4	80·3	81·5	78·8	80·4	81·6	81·7	82·0
22	81·4	81·5	81·4	81·4	81·4	80·7	81·0	81·7	82·5	83·5	83·4	81·8	81·1	81·3	82·3
23	81·2	80·6	81·2	81·4	81·4	81·5	81·6	82·5	83·0	84·5	85·4	85·0	85·0	85·4	85·5
24	81·1	80·8	81·0	81·5	81·4	81·2	80·9	81·0	81·5	83·6	84·5	85·0	85·5	85·4	85·6
25	81·8	81·7	81·6	81·6	81·6	81·6	80·3	80·7	80·7	80·8	81·6	80·2	78·7	79·6	81·3
26	78·6	78·5	78·4	78·4	77·8	77·5	77·6	78·3	78·4	79·1	79·8	80·3	80·0	80·7	81·4
27	77·8	77·9	78·5	78·7	78·4	78·4	78·6	79·1	80·8	81·9	82·7	82·6	83·5	84·0	84·1
28	81·6	81·3	80·2	80·5	80·6	80·7	81·2	81·6	82·8	82·0	84·5	85·0	85·3	85·1	84·4
29	81·5	81·4	81·3	81·5	81·5	80·8	80·5	80·3	80·7	79·5	80·5	79·0	78·5	77 8	77·7
30	80·4	80·6	80·5	79·8	79·5	79·0	79·5	79·2	79·3	80·0	80·2	80·6	80·7	81·2	81·6
31	79·3	79·6	79·5	79·3	79 5	79·6	79·4	79·7	79·2	79·2	78·8	79·1	77·1	77·2	7?·6
Mean . .	80·5	80·5	80·5	80·5	80·4	80·2	**80·1**	80·5	80·9	81·5	**82·1**	82·0	82·0	81·9	81·9
Variation. .	—0·6	—0·6	—0·6	—0·6	—0·7	—0·9	**—1·0**	—0·6	—0·2	+0·4	**+1·0**	+0·9	+0·9	+0·8	+0·8
Mean in °C .	26·9	26·9	26·9	26·9	26·9	26·8	**26·7**	26·9	27 2	27 5	**27·8**	27 8	27·8	27·7	27·7
Variation in °C.	—0·3	—0·3	—0·3	—0·3	—0·3	—0·4	**—0·5**	—0·3	0·0	+0·3	**+0·6**	+0·6	+0·6	+0·5	+0·5

AUGUST.

1	78·4	78·5	78·4	78·2	78·3	78·2	77·8	77·7	78·1	78·5	79·8	80·0	80·3	81·3	81·3
2	79·7	80·1	80·2	80·3	80·2	80·4	80·6	81·4	82·5	83·4	81·2	82·6	84·4	84·7	85·5
3	82·0	81·6	81·4	80·6	8 ·4	81·2	80·5	81·2	81·7	83·6	84·5	84·4	84·5	84·5	84·6
4	82·0	82·0	81·8	81·5	81·5	81·5	81·4	81·6	83·0	83·1	84·4	84·3	84·5	84·5	84·6
5	79·6	80·4	80·4	78·5	79·1	77·5	79·2	80·2	8·6	82·6	83·6	83·8	84·5	83·7	84·3
6	80·6	81·1	81·2	81·2	81·1	81·1	81·4	81·9	82·1	82·4	79·5	80·7	81·2	83·0	84·4
7	80·8	81·0	80·0	78·4	77·7	77·5	77·6	77·5	78·1	78·6	79·5	80·7	80·5	79·7	79·4
8	78·2	77·8	77·8	77·5	77·6	77·8	77·6	78·3	78·1	79·0	78·7	79·9	78·6	78·1	78·7
9	78·2	78·6	79·3	79·6	79·9	80·2	80·1	80·1	80·0	79·8	81·1	82·2	82·5	82·4	83·2
10	81·2	81·2	81·3	81·4	81·5	81·5	81·5	81·8	82·7	83·0	80·8	79·8	79·9	80·4	82·0
11	81·4	81·3	81·3	81·3	81·3	79·6	80·8	81·0	81·9	81·0	82·3	84·0	83·5	84·1	84·3
12	81·4	81·4	81·4	81·3	81·2	80·7	80·7	81·5	82·2	82·9	83·1	82·8	83·8	83·4	83 6
13	81·3	80·7	81·0	81·2	81·2	81·4	81·3	81·3	82·3	83·0	83·4	84·3	83·8	84·3	84·2
14	80·5	79 9	80·1	79·3	79·0	78·7	79·0	79·0	79·0	80·2	82·3	83·6	84·1	84·4	83·7
15	80·5	80·4	80·5	80·0	80·3	80·2	80·4	79·9	80·6	81·6	79·7	81·5	83·0	82·9	83·3
16	80·3	80·3	79·5	79·5	80·2	79·5	80·1	80·6	79·5	81·0	80·4	81·7	80·8	81·4	81·5
17	79·5	78·8	78·6	78·7	78·7	79·0	79·3	80·2	80·7	81·5	81·7	79·8	81·5	81·9	80·7
18	79·1	79·3	79·3	79·4	80·0	79·6	78·7	79·4	79·6	80·3	81·2	80·4	81·4	81·3	80·1
19	80·5	79·9	79·2	79·6	79·8	80·0	80·0	79·8	81·6	81·6	81·8	82·8	83·8	83·4	83·1
20	80·3	80·4	79·8	80·3	80·5	80·3	80·6	80·5	81·1	82·0	82·5	83·6	81·8	81·0	82·0
21	80·4	80·5	80·5	80·4	79·9	78·7	79·4	79·5	79·3	78·1	79·8	80·8	80·4	80·3	80·0
22	79·7	80·0	80·0	79·2	79·5	79·1	79·6	80·2	80·7	81·4	81·7	82·4	81·7	81·4	82·2
23	80·3	80·4	80·4	80·5	80·4	80·3	78·5	78·5	80·3	80·9	80·7	80·6	81·3	81·5	81·2
24	79·9	80·0	79·3	79·0	80·0	80·2	79·9	80·3	78·7	77·9	80·1	81·7	83·2	83·5	83 1
25	80·3	80·3	80·3	79·9	79·7	79·6	79·5	80·2	81·5	82·2	82·0	82·5	83·5	84·0	84·3
26	80·5	80·6	80·6	80·5	80·5	80·4	80·4	80·5	81·7	81·5	83·6	84·4	83·2	82·8	84 3
27	80·1	79·8	79·5	78·5	78·3	78·6	79·4	79·8	81·3	80·6	81·5	82·6	83·5	83·3	82·8
28	78·0	**77·2**	78·5	78·6	78·4	78·3	78·7	79·5	80·2	80·5	82·3	82·5	83·1	82·0	81·9
29	78·6	78·8	79·3	79·3	79·3	79·1	77·7	77·8	78·6	80·7	81·0	81·6	81·5	82·4	83·0
30	78·4	78·2	79·0	78·6	78·4	78·3	78·9	79·6	79·5	79·2	81·1	81·4	81·2	82·5	82·8
31	79·4	79·4	79·4	79·4	79·6	79·6	80·3	80·6	81·1	81·7	83·3	84·0	83·7	84·0	82·5
Mean . .	80·0	80·0	80·0	79·8	79·8	**79·6**	79·7	80·0	80·6	81·1	81·6	82·2	82·4	82·5	**82 7**
Variation. .	—0·8	—0·8	—0·8	—1·0	—1 0	**—1·2**	—1·1	—0·8	—0·2	+0 3	+0·8	+1·4	+1·6	+1·7	+1·9
Mean in °C .	26·7	26·7	26·7	26·6	26·6	**26·4**	26 5	26 7	27·0	27·3	27 6	27·9	28·0	28·1	28·2
Variation in °C.	—0·4	—0·4	—0·4	—0·5	—0·5	**—0·7**	—0·6	—0·4	—0·1	+0·2	+0·5	+0·8	+0·9	+1·0	+1·1

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

JULY. (IN DEGREES FAHRENHEIT.)

Hours.										Mean.		Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24		°F	°C	Time.	Mag.	Time.	Mag.	
												H. M.		H. M.		
78·1	77·5	77·4	78 9	8·9	78·3	79·8	79·7	79·3		78·7	25·9	12 56	83·2	1 32	75·4	1
76·8	78·9	81·0	82·3	82·6	83·3	83·3	83·3	83·4		79·8	26·6	21 46	83·7	12 51	**74·4**	2
83·2	84·5	84·4	82·4	82·1	81·9	82·9	83·3	83·4		**83·5**	**28·6**	11 6	**86·8**	12 36	79·5	3
84·5	84·6	84·5	84·4	84·3	83·0	80·0	79·3	80·0		83·4	28·6	13 28	85·6	21 2	78·4	4
76·6	77·8	78·5	78·7	78·6	78·6	78·8	76·8	76·4		79·2	26·2	8 48	82·3	23 30	76·3	5
80·5	80·0	80·0	80·2	80·4	80·4	80·3	79·9	80·2		78·4	25·8	23 25	80·7	6 18	75·4	6
84·0	83 5	82·4	81·8	82·0	82·8	83·0	82·2	82·7		82·1	27·8	12 30	85·7	6 24	78·5	7
81·8	84·4	84·3	83·8	83·5	83 5	83·4	82·8	82·0		83·5	28 6	11 55	86·8	14 56	80·0	8
81·2	82·1	82·3	81·9	81·8	81·8	82·4	82·2	81·3		82·5	28·1	12 2	86·5	0 54	79·4	9
80·8	82·4	82·6	82·2	82·5	82·6	82·7	82·8	82·1		81·6	27·6	11 58	83·6	14 2	76.4	10
83·6	83·6	82·4	82·4	82·5	82·5	82·5	82·5	82·2		82·4	28·0	15 56	84·3	9 45	77·2	11
82·1	82·5	82·4	80·8	80·4	80·6	80·7	82·3	82·4		82·3	27·9	11 0	85·4	18 25	79·7	12
86·5	85 8	84·6	83·5	82 6	81·8	82·4	80·0	80·6		83·1	28·4	15 35	86·7	22 45	78·9	13
81·4	79·5	79·4	78·5	79·1	79·0	77·2	78·4	78·0		80·7	27·1	10 42	82·6	23 48	76·0	14
77·5	78·3	77·4	76·9	77·5	77·4	77·4	77·2	77·5		**77·6**	**25·3**	11 22	80·7	1 45	75·0	15
79·7	78·6	77·4	77·8	79·0	80·4	80 3	80·3	80·5		79·1	26·2	12 55	82·4	5 32	76·1	16
83·2	81·9	81·3	81·1	80·6	81·5	81·5	81·3	80·6		81·5	27 5	14 4	83·7	10 38	78·6	17
82·5	82·5	82·2	81·6	81·5	80·1	80·7	81·4	81·0		81·4	27·4	14 35	85·4	4 10	77·5	18
81·5	81·1	80·5	80·5	79·8	80·3	80·3	80 3	80·4		80·3	26·8	10 25	82·8	3 14	77·3	19
84·4	84·4	83·8	82·7	81·5	82·2	81·7	80·2	81·4		81·6	27·6	14 5	85·4	6 26	78·2	20
82·1	81·8	81·3	81·6	81·5	80·7	81·4	80·6	80·7		81·0	27·2	9 50	82·6	10 48	77·5	21
82·3	82·8	83·3	81 3	81·3	80·4	80·3	80·5	80·7		81·6	27·6	9 52	83·8	20 20	79·8	22
84·8	83·5	83·0	81·9	80·6	81·1	81·4	81·8	81·8		82·7	28·2	13 28	86·1	1 15	79·8	23
85·1	84·3	82·0	82·5	82·6	82·1	81·4	81·6	81·8		82·6	28·2	14 46	85·7	1 48	80·1	24
80·2	78·3	77·6	77·4	77·3	77·7	78·0	78·2	78·1		79·9	26·6	10 34	82·1	19 12	76·8	25
81·3	80·6	80·4	80·2	79·7	79·4	79·1	78·8	78·5		79·3	26·3	14 25	81·6	5 40	77·4	26
84·1	83·9	83·1	82·1	82·1	82·2	82·2	81·8	81·8		81·3	27·4	13 50	84·5	1 2	77·4	27
84·7	84·4	83·5	82·9	82·6	82·2	81·2	81·9	81·6		82·6	28·1	11 20	85·6	2 4	80·0	28
78·8	79·6	79·4	78·7	78·8	79·8	80·0	78·9	80·0		79·9	26·6	1 12	81·6	14 22	76·6	29
82·4	82·3	81·8	81·4	81·3	80·8	80·7	78·3	78·4		80·4	26·9	15 26	82·6	8 4	77·3	30
78·5	77·9	77·8	77·9	78·1	78·4	78·2	78·3	78 2		78·7	25 9	7 30	80·2	13 20	76·4	31
81·7	81·7	81·4	81·0	80·9	80·9	80·8	80·5	80·5		81·1	27·2					Mean.
+0·6	+0·6	+0·3	-0 1	—0 2	—0·2	-0·3	—0·6	—0·6								Variation.
27·6	27·6	27·4	27·2	27·2	27·2	27·1	26·9	20·9								Mean in °C.
+0·4	+0·4	+0·2	0·0	·0·0	0·0	—0·1	—0·3	—0·3								Variation in °C.

AUGUST.

82·1	81·4	80·6	79·5	80·3	80·1	80·2	79·6	79·6		79·5	26·4	15 26	82·7	6 46	77·5	1
85·6	85·4	84·3	83·4	82·6	82·6	82·5	82·3	82·2		82·4	28·0	15 20	**86·3**	0 5	79·5	2
84·2	83·0	83·2	82·8	82·6	82·7	82·5	82·4	82·3		**82·7**	**28·2**	14 12	85·3	6 55	80·1	3
84·3	83·4	79·6	80·2	80·6	80·8	80·6	81·3	80·4		82·2	27·9	12 20	85·5	17 50	79·3	4
83·7	81·1	80·5	79·6	80·2	79·8	80·5	80·0	79·5		81·1	27·3	12 32	84·6	5 25	**76·3**	5
84·0	83·3	82·5	82·3	82·4	82·2	82·1	80·8	81·3		81·8	27·7	15 24	84·6	10 30	79·0	6
77·9	78·5	77·5	78·5	78·5	78·4	77·8	77·6	78·1		78·7	25·9	12 10	81·6	5 52	77·1	7
78 9	78·2	77·9	79·1	78·5	78·6	78·5	77·8	77·8		**78·3**	**25·7**	13 38	80·5	3 25	77·0	8
83·1	81·1	81·6	81·5	81·5	81·6	80·8	81·2	80·8		80·9	27·2	14 20	83·3	0 22	78·0	9
82·5	82·1	81·5	81·5	81·6	81·1	80·7	80·9	81·4		81·4	27·4	9 56	83·7	11 58	79·0	10
83·6	80·4	81·0	81·5	81·4	81·6	81·6	81·5	81·5		81·8	27·7	12 12	84·8	5 25	79·3	11
83·8	82·6	80·7	81·2	80·7	81·2	81·3	81·4	81·4		81·9	27·7	13 10	84·5	17 18	79·8	12
82·9	82·4	81·8	81·5	81·3	81·3	80·8	81·3	80·5		82·0	27·8	14 40	84·7	6 55	80·0	13
84·3	83·1	81·5	81·2	80·6	80·8	80·6	79·3	80·0		81·0	27·2	15 22	84·6	4 52	78·0	14
83·6	82·6	82·0	81·2	80·6	79·5	79·5	80·0	80·4		81·0	27·2	13 8	84·0	7 10	79·2	15
82·1	81·7	81·3	79·5	80·3	80·0	79·6	79·7	79·6		80·4	26·9	12 18	82·5	8 18	78·3	16
80·4	80·5	80·9	80·5	79·6	79·3	78·9	78·7	78·3		79·9	26·6	12 38	82·5	21 15	77·5	17
80·8	81·0	80·3	79·4	80·1	80·3	80·6	80·4	80·5		80·1	26·7	12 10	82·2	6 12	77·9	18
81·6	82·0	80·0	80·6	80·8	80·7	80·7	81·0	80·3		81·0	27·2	12 42	84·4	1 58	78·4	19
81·8	81·3	80·7	80·6	80·5	80·6	80·6	80·4	80·3		81·1	27·2	12 8	84·0	2 35	79·5	20
80·1	80·3	80·3	80·4	80·5	80·5	80·5	80·2	79·8		80·0	26.7	11 30	81·4	9 4	77·3	21
81·6	80·5	79·5	80·4	80·6	80·7	80·6	80·6	79·7		80·5	26·9	11 12	82·7	3 32	78·5	22
81·0	80·7	80·5	80·6	80·4	80·4	80·2	80·5	79·5		80·4	26 9	14 10	81·6	7 0	77·7	23
83·3	82·8	81·8	80·8	80·5	80·5	80·4	80·6	80·5		80·8	27·1	13 35	83·7	9 20	77·5	24
83·7	82·5	81·8	81·1	80·7	79·5	79·5	80·4	80·5		81·2	27·3	13 2	84·8	6 56	79·0	25
83·6	82·8	81·0	81·0	79·9	78·5	78·1	79·4	80·0		81·2	27 3	12 20	84·5	20 50	77·5	26
83·0	80·4	80·2	80·5	79·8	80·2	79·8	79·4	78·2		80·5	26|9	12 5	84·0	23 40	77·4	27
79·3	79·5	80·1	78·7	78·6	79·4	79·5	79·7	79·2		79·7	26·5	13 18	83·6	1 30	76·6	28
82·1	82·0	80·5	79·8	77·7	77·8	78·3	79·1	78·8		79·8	26·6	14 25	83·2	6 55	77·2	29
82·8	79·8	79·5	77·9	78·1	77·6	78·4	78·0	79·3		79·5	26·4	14 35	83·4	22 24	77·4	30
83·5	82·9	82·4	81·3	81·4	80·8	80·8	80·7	80·5		81·3	27·4	12 55	84·8	2 30	78·1	31
82·4	81·7	80·9	80·6	80·4	80·3	80·2	80·2	80·1		80·8	27·1					Mean.
+1·6	+0·9	+0·1	—0·2	—0·4	—0·5	—0·6	—0·6	—0·7								Variation.
28·0	27·6	27·2	27·0	26·9	26·8	26·8	26·0	26·7								Mean in °C.
+0·9	+0·5	+0·1	—0·1	—0·2	—0·3	—0·3	—0·3	—0·4								Variation in °C.

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER.

(IN DEGREES FAHRENHEIT.)

Date.	Hours.															
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15
1	80·4	80·3	78·2	78·0	77·7	77·9	79·6	80·4	81·2	81·7	81·3	83·1	83·5	83·1	82·2
2	79·2	79·3	80·0	79·8	80·0	80·1	80·2	80·4	80·5	81·0	82·2	82·8	81·4	80·9	80·2
3	79·5	79·6	79·7	79·6	79·6	79·7	80·2	80·3	79·6	79·6	80·0	81·4	80·8	82·5	83·3
4	77·8	78·3	79·4	78·7	78·7	79·0	79·1	79·2	79·4	79·5	79·8	78·4	80·5	81·0	81·4
5	80·3	79·8	79·6	79·8	79·7	78·8	79·5	80·1	81·2	81·9	82·0	82·3	81·5	82·2	82·5
6	79·5	79·6	79·4	79·2	79·3	79·5	79·6	80·5	81·2	82·3	83·5	83·4	83·5	84·0	84·3
7	79·7	79·1	78·7	78·6	78·6	78·5	79·4	79·6	80·2	81·2	82·5	83·6	84·2	84·7	84·7
8	79·4	79·3	79·5	79·4	78·8	78·8	79·0	80·3	81·5	82·3	83·5	84·3	84·6	84·8	85·1
9	79·6	79·3	78·6	78·5	78·6	78·4	78·8	80·3	81·0	82·2	82·9	84·3	84·8	85·4	84·9
10	78·3	78·5	79·2	79·4	78·9	78·5	78·8	79·7	80·9	82·3	82·5	83·6	84·6	85·1	85·3
11	79·4	79·2	79·1	79·3	78·9	78·8	79·3	79·7	81·3	82·2	83·2	83·8	84·5	85·4	85·3
12	79·6	79·5	79·4	79·2	78·7	78·3	78·3	80·1	81·4	82·4	83·4	83·9	84·8	85·3	85·2
13	79·6	79·4	78·8	78·7	78·7	79·0	79·2	80·2	80·9	82·0	83·6	84·4	84·8	85·3	85·5
14	79·4	79·4	79·4	79·2	78·2	78·2	79·3	79·7	81·0	81·2	81·5	82·5	83·8	84·3	84·5
15	78·1	77·8	77·7	78·3	78·2	77·8	78·5	79·6	81·4	81·7	82·5	83·0	83·8	84·5	84·8
16	78·4	78·2	79·4	79·3	78·5	78·7	78·6	80·1	81·5	83·2	82·4	83·1	84·3	84·3	84·7
17	78·7	79·2	78·4	78·6	78·7	79·4	80·1	81·4	82·0	81·6	83·6	84·9	85·5	85·7	85·6
18	81·3	79·8	78·6	78·7	75·7	75·2	75·4	76·4	77·6	78·4	79·1	79·6	80·6	80·5	80·5
19	77·7	78·2	78·4	78·3	78·5	78·5	78·8	80·2	81·5	82·9	84·1	85·1	86·2	85·4	84·6
20	80·3	80·3	79·8	79·7	79·6	79·6	79·8	80·7	81·4	82·4	82·5	81·6	82·5	82·2	83·7
21	80·2	79·7	80·0	79·7	80·0	79·8	80·0	80·7	79·6	79·3	80·3	81·4	81·6	81·0	82·3
22	80·7	80·7	80·3	80·5	79·1	79·4	79·4	80·3	81·2	81·3	81·8	81·7	82·4	82·6	82·7
23	80·3	80·3	79·7	79·6	79·7	79·8	80·3	80·7	82·4	82·2	82·5	82·6	84·5	84·5	84·5
24	80·1	80·1	80·2	80·1	80·1	80·1	80·2	81·1	82·1	83·2	84·6	85·2	85·1	85·1	85·0
25	80·2	80·0	79·7	79·5	79·6	79·4	79·2	80·3	81·3	82·6	83·6	84·[illegible]	84·4	85·0	84·6
26	80·4	80·2	80·0	80·0	79·9	80·1	80·3	81·3	83·0	83·5	84·2	84·3	84·8	85·2	84·6
27	80·5	80·4	79·8	80·0	80·0	80·0	79·5	77·5	79·6	81·6	83·6	84·5	84·8	85·0	84·6
28	80·1	80·4	80·1	79·7	79·6	79·6	80·0	80·8	82·3	83·2	84·1	84·3	85·2	85·4	85·4
29	80·6	80·6	80·5	80·4	80·2	80·0	80·4	81·0	82·2	83·5	84·3	84·6	85·2	85·6	84·7
30	80·4	80·4	80·4	80·4	80·4	80·4	80·6	81·0	81·5	81·5	81·7	81·3	81·7	81·2	81·3
Mean .	79·7	79·6	79·4	79·3	79·1	79·0	79·4	80·1	81·1	81·8	82·6	83·1	83·7	83·9	83·9
Variation .	—1·4	—1·5	—1·7	—1·8	—2·0	—2·1	—1·7	—1·0	0·0	+0·7	+1·5	+2·0	+2·6	+2·8	+2·8
Mean in °C .	26·5	26·4	26·3	26·3	26 2	26·1	26·3	26·7	27·3	27·7	28·1	28·4	28·7	28·8	28·3
Variation in °C	—0·8	—0·9	—1·0	—1·0	—1·1	—1·2	—1·0	—0·6	0·0	+0·4	+0·8	+1 1	+1·4	+1 5	+1·5

OCTOBER.

1	78·7	77·7	76·9	76·4	76·1	75·8	76·1	76·3	76·7	76·8	76·5	77·7	79·4	80·3	80·4
2	75·9	76·4	76·5	76·8	77·6	78·3	78·6	78·7	77·2	77·2	77·5	77·2	77·8	78·6	79·2
3	78·7	78·7	79·1	79·1	78·7	78·6	78·6	78·7	79·6	80·3	81·3	82·7	82·7	82·7	83·6
4	79·2	78·7	78·6	78·5	77·8	78·0	78·3	78·9	80·5	81·2	82·6	83·1	83·3	82·9	83·2
5	77·0	77·3	77·3	77·5	77·5	77·5	77·6	78·3	79·6	80·3	81·2	81·9	82·7	83·0	83·1
6	79·4	79·4	79·3	78·6	78·6	78·9	78·3	78·9	80·1	81·6	82·2	83·1	83·7	83·3	82·7
7	77·0	77·5	78·1	78·2	78·3	78·4	77·5	77·8	77·6	77·6	78·2	79·3	79·5	79·6	79·6
8	80·1	80·3	80·5	80·5	80·4	80·5	80·2	80·3	81·0	81·5	82·1	82·7	82·5	83·2	83·4
9	80·6	80·6	80·6	80·7	80·7	80·6	80·5	80·6	80·6	80·6	80·8	81·7	81·8	82·0	81·6
10	79·5	79·4	78·8	79·4	79·6	79·4	79·4	79·5	79·8	80·4	80·3	81·3	81·4	81·2	82·3
11	78·5	77·9	78·1	78·3	78·5	78·5	77·7	77·4	78·4	79·3	79·6	80·3	80·5	80·4	80·2
12	76·4	76·0	76·6	77·4	77·3	77·4	77·7	77·8	77·7	78·3	78·7	79·8	80·8	78·3	77·4
13	78·0	78·1	77·7	78·4	78·4	78·4	78·2	78·8	78·7	78·8	80·1	79·4	79·4	79·4	79·7
14	77·4	77·8	77·3	76·7	78·2	78·9	78·7	79·0	80·6	81·0	81·4	80·2	82·4	80·7	79·5
15	79·2	79·1	79·0	78·7	78·8	78·8	79·2	79·9	80·7	81·7	82·6	79·5	79·8	80·3	79·0
16	79·1	79·2	79·2	79·1	78·5	77·8	77·7	78·2	78·5	78·0	77·3	77·6	77·8	77·6	77·7
17	73·4	78·5	78·3	78·2	77·2	78·2	78·2	78·5	78·8	79·7	80·5	81·1	82·0	82·6	82·3
18	76·7	76·7	76·7	77·1	78·0	76·7	76·8	77·6	79·3	80·5	81·8	82·6	82·8	83·6	83·8
19	78·5	78·3	78·4	78·3	77·7	77·6	78·2	78·7	79·9	81·2	82·1	83·3	83·6	84·0	84·3
20	79·3	79·3	78·7	78·4	77·3	78·4	78·3	79·9	81·4	82·3	84·3	86·2	87·2	86·8	86·7
21	79·8	79·9	79·8	79·8	79·4	79·3	79·3	80·5	81·8	83·3	85·1	86·7	86·8	87·0	86·8
22	80·2	79·6	79·0	78·6	78·8	78·9	79·5	80·5	82·1	83·5	85·1	86·5	88·6	89·0	87·5
23	79·1	79·2	78·4	77·4	76·7	76·0	77·2	78·6	80·4	81·7	83·4	84·5	86·0	87·2	87·1
24	78·7	78·5	78·0	77·7	77·4	77·1	77·1	77·8	79·6	81·2	82·6	84·3	85·7	86·6	86·3
25	77·2	76·8	75·9	75·8	75·5	74·7	74·5	76·2	77·7	79·2	80·6	82·4	84·6	84·7	84·5
26	75·5	74·6	74·7	74·4	74·0	73·3	73·2	74·7	76·9	78·3	80·1	81·9	84·5	85·6	85·4
27	75·5	74·5	74·5	74·5	73·8	73·5	73·2	74·1	76·1	78·3	80·8	83·2	85·6	86·3	86·9
28	75·4	74·3	74·4	74·6	74·1	73·6	73·8	74·9	77·9	79·1	81·6	84·0	85·5	86·6	87·4
29	75·3	74·7	75·7	75·5	74·5	73·8	73 2	75·4	78·2	80·4	83·3	85·1	87·3	88·1	86·1
30	77·0	77·2	77·4	77·3	76·6	76·5	76·6	77·5	80·4	82·3	84·6	86·7	88·2	86·4	85·5
31	79·5	79·1	78·6	78·7	78·1	77·7	77·6	79·4	82·5	84·2	86·1	86·1	86·2	86·0	86·3
Mean .	78·1	77·9	77·8	77·8	77·6	77·5	77·5	78·2	79·4	80·3	81·4	82·3	83·2	83·4	83·2
Variation .	—1·9	—2·1	—2·2	—2·2	—2.4	—2·5	—2·5	—1·8	—0.6	+0·3	+1·4	+2·3	+3·2	+3·4	+3·2
Mean in °C .	25 6	25·5	25·4	25 4	25·3	25·3	25·3	25·7	26·3	26.8	27·4	27·9	28.4	28·6	28·4
Variation in °C	—1·0	—1 1	—1·2	—1·2	—1·3	—1·3	—1·3	—0·9	—0·3	+0·2	+0·8	+1·3	+1·8	+2·0	+1·8

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

SEPTEMBER. (IN DEGREES FAHRENHEIT).

Hours.									Mean.		Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	°F	°C	Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
81·6	81·4	81·3	80·8	80·7	80·5	80·4	80·0	79·1	80·6	27·0	12 48	84·1	4 3	76·6	1
80·6	80·8	80·8	80·6	80·5	80·6	80·1	78·9	79·3	80·4	26·9	11 38	84·0	21 45	78·1	2
83·2	82·7	81·7	80·8	80·4	80·1	80·1	80·1	79·6	80·6	27·0	14 40	84·0	0 24	79·2	3
81·0	81·4	80·0	79·3	78·6	79 4	79·6	79·6	79·6	79·5	26·4	14 26	81·8	0 40	76·6	4
82·3	82·0	81·2	80·4	80·5	80·3	79·3	79·5	79·6	80·7	27·1	11 20	83·0	5 32	77·5	5
84·4	82·8	82·6	81·0	80·7	80·5	80·3	80·2	79·8	81·3	27·4	15 20	84·8	3 44	77·4	6
83·9	82·7	81·8	81·2	80·8	80·7	80·3	79·8	79·6	81·0	27·2	14 4	85·4	5 38	78·3	7
84·8	84·0	83·0	81·6	81·0	80·7	80·5	80·2	80·1	81·5	27·5	14 20	85·5	6 10	78·5	8
84·3	83·7	82·8	81·8	81·2	80·6	80·2	79·4	78·7	81·3	27·4	13 30	85·7	5 58	78·0	9
85·3	84·3	83·1	81·7	81·2	80·8	80·6	80·4	79·6	81·4	27·4	14 30	85·7	0 25	78·2	10
85·2	83·4	82·4	81·7	81·5	81·3	81·2	81·1	80·3	81·6	27·6	13 45	85·7	2 2	78·6	11
83·7	83·4	82·6	81·6	81·4	80·8	80·7	80·5	80·2	81·4	27·4	12 56	85·6	5 44	77·8	12
85·4	84·3	83·4	81·8	81·4	80·8	80·6	79·9	79·3	81·5	27·5	14 20	85·8	3 50	78·4	13
84·5	83·6	82·5	81·3	80·7	80·4	79·6	78·9	78·4	80·9	27·2	14 28	84·8	5 8	77·7	14
84·4	84·1	82·6	81·5	81·3	80·7	80·3	79·4	79·0	80·9	27·2	14 20	85·6	2 25	77·5	15
84·7	84·0	82·7	81·5	81·3	80·6	80·4	79·7	79·1	81·2	27·3	14 58	85·1	1 40	78·0	16
84·7	83·0	82·4	82·0	81·8	81·6	81·5	81·3	81·3	81·8	27·7	13 44	86·1	2 40	78·3	17
80·8	80·8	80·5	80·4	80·2	79·4	78·6	77·8	77·6	**78·9**	**26·1**	15 40	81·4	4 38	**74·8**	18
84·2	82·8	81·8	81·4	81·3	81·2	80·8	80·7	80·6	81·4	27·4	12 22	**86·6**	0 24	77·4	19
84·4	83·6	82·5	82·2	81·7	81·4	81·1	81·0	80·8	81·5	27·5	15 20	84·7	4 44	79·4	20
81·1	79·9	79·2	79·5	80·4	80·8	80·9	81·0	80·8	80·4	26·9	14 46	83·3	8 54	78·5	21
81·8	81·4	81·4	81·4	81·3	80·8	80·6	80·5	80·5	81·0	27·2	14 0	83·2	4 40	78·3	22
84·2	82·7	82·1	81·4	81·1	80·6	80·6	80·5	80·4	81·6	27·6	12 58	84·7	5 24	79·5	23
84·4	83·4	82·5	81·4	81·2	81·0	80·6	80·4	80·3	82·0	27·8	11 56	85·6	5 38	80·0	24
83·8	82·4	81·9	81·4	81·3	80·8	80·7	80·6	80·5	81·5	27 5	13 46	85·5	6 10	78·8	25
82·6	80·5	80·7	80·5	80·4	80·5	80·5	80·5	80·5	81·6	27·6	13 5	85·6	4 2	79·4	26
84·4	83·4	82·4	81·4	81·3	80·7	80·6	80·5	80·4	81·5	27·5	12 48	85·4	7 30	77·3	27
85·3	84·0	82·7	81·6	81·3	81·2	80·8	80·7	80·5	82·0	27·8	14 6	85·8	6 3	79·4	28
84·6	83·3	82·5	81·5	81·4	81·2	80·8	80·5	80·5	**82·1**	**27·8**	13 50	85·8	5 30	79·9	29
81·6	80·4	79·7	80·4	80·4	80·4	80·4	79·6	79·2	80·7	27·1	13 0	82·3	17 14	79·0	30
83·6	82·7	81·9	81·2	80·9	80·7	80·4	80·1	79·8	81·1	27·3					Mean.
+2·5	+1·6	+0·8	+0·1	—0·2	—0·4	—0·7	—1·0	—1·3							Variation.
28·7	28·2	27·7	27·3	27·2	27·1	26·9	26·7	26·6							Mean in °C
+1·4	+0 9	+0·4	0·0	—0·1	—0·2	—0·4	—0·6	—0·7							Variation in °C.

OCTOBER.

80·5	80·3	80·2	80·1	80·3	80·0	80·1	79·1	77·8	78·3	25·7	14 40	80·8	5 57	75·6	1
79·1	79·6	79·5	79·4	79·4	79·4	79·3	79·2	79·1	78·2	25 7	16 30	79·9	0 5	75·4	2
84·1	82·4	81·0	80·6	80·5	79·7	79·1	78·5	79·3	80·3	26·8	15 38	84·4	6 12	78·5	3
83·9	83·7	83·1	82·2	81·7	81·5	77·2	76·6	77·2	80·5	26·9	15 25	84·2	21 56	76·4	4
83·1	83·6	82·7	82·0	81·8	81·8	81·7	79·7	79·4	80·3	26·8	16 36	83·9	0 15	76·6	5
82·0	82·7	82·3	81·8	81·6	81·4	81·4	77·8	76·2	80·6	27·0	13 30	84·4	23 25	75·7	6
80·2	80·4	79·9	79·5	79·6	79·7	79·7	79·7	79·8	78·9	26·1	15 55	81·7	0 5	76·0	7
83·3	82·6	81·8	81·4	81·3	81·0	80·8	80·7	80·7	81·4	27·4	14 50	83·6	6 32	80·0	8
81·9	81·6	81·4	81·0	80·7	80·7	80·5	80·4	79·8	80·9	27·2	15 20	82·4	23 57	79·4	9
82·0	80·8	79·7	79·4	79·3	79·3	79·4	78·8	78·5	80·0	26·7	14 32	82·6	23 57	78·3	10
80·0	79·5	79 2	76·6	76·9	76·7	76·2	75·6	75·6	78·3	25·7	12 25	80·9	23 0	74·6	11
78·3	78·6	78·6	78·5	78·5	78·4	78·5	77·4	77·7	**78·0**	**25·6**	12 40	81·2	1 40	75·6	12
79·4	78·7	79·3	79·0	79·2	78·4	77·6	77·6	76·8	78·6	25·9	10 57	80·7	23 25	76·4	13
79·1	78·8	78·4	78·4	79·0	79·3	79·4	79·4	79·0	79·2	26·2	12 50	82·7	3 22	76·4	14
79·6	79·8	78·8	78·5	78·6	78·5	78·7	79·0	79·1	79·5	26·4	10 48	83·4	3 15	78·4	15
77·2	77·7	77·5	77·8	77·6	77·3	77·5	77·8	78·4	78·0	25·6	3 45	79·4	15 25	76·7	16
81·8	80·8	80·5	77·4	75·7	75·8	76·3	76·5	76·6	79·0	26·1	13 25	82·8	20 0	75·4	17
83·9	83·0	81·7	80·7	79·8	79·2	79·0	78·7	78·6	79·8	26·6	14 16	84·1	5 58	76·5	18
83·7	82·8	81·8	81·5	81·3	81·1	80·5	80·0	79·7	80·7	27·1	14 30	84·6	5 4	77·4	19
86·7	85·6	84·3	83·4	82·7	82·4	82·1	81·4	80·9	82·3	27·9	12 22	87·7	6 20	77·7	20
86·5	85·7	83·9	82·8	82·5	82·3	81·8	80·8	80·2	**82·6**	**28·1**	12 6	87·7	5 55	78·8	21
86·9	85·5	84·0	83·0	82·4	81·7	80·8	80·1	79·3	82·5	28·1	13 4	**89·4**	3 56	78·4	22
86·3	84·7	82·9	81·8	81·5	80·8	80·5	79·7	78·7	81·2	27·3	13 54	87·7	5 40	75·7	23
85·3	84·1	82·3	81·3	80·7	80·4	80·2	79·0	77·7	80·8	27·1	13 50	86·8	6 14	76·6	24
84·5	83·6	82·1	81·2	80·4	79 8	79·2	76·8	76·0	79·3	26·3	13 5	85·6	6 12	74·3	25
84·7	83·0	81·1	79·8	79·4	79·1	78·2	76·6	75 7	78·5	25·8	13 57	86·0	6 8	72·7	26
86·8	86·0	82·2	80·5	79·8	78·8	77·6	76·7	75·7	78·9	26·1	14 4	87·2	6 18	73·0	27
86·9	84·9	82·6	80·8	80·3	79·9	78·5	76·8	75·8	79·3	26·3	14 54	87·8	5 55	73·3	28
85·3	83·6	82·3	81·4	81·3	80·4	79·5	76·6	77·7	79·9	26·6	15 15	88·7	6 30	**72·4**	29
85·2	84·3	82·8	82·0	81·6	81·2	80·8	80·4	79·8	81·2	27·3	12 30	88·7	6 20	76·3	30
86·1	84·2	83·3	82·6	82·0	81·7	81·3	80·3	79·7	82·0	27·8	14 55	86·7	6 30	77·3	31
83·0	82·3	81·3	80·5	80·2	79·9	79·5	78·7	78·3	80·0	26·6					Mean.
+3·0	+2·3	+1·3	+0·5	+0·2	—0·1	—0·5	—1·3	—1·7							Variation.
28·3	27·9	27·4	26·9	26·8	26·6	26·4	25·9	25·7							Mean in °C
+1·7	+1·3	+0·8	+0·3	+0·2	0·0	—0·2	—0·7	—0·9							Variation in °C

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER. (IN DEGREES FAHRENHEIT.)

Date.	Hours.															
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15	
1	79·3	78·8	78·4	77·7	77·6	77·8	78·1	79·2	81·8	84·3	86·3	88·1	89·7	**90·8**	88·0	
2	79·7	80·1	80·5	80·1	78·0	76·5	76·6	76·5	76·7	77·3	77·8	78·4	78·4	78·3	78·6	
3	78·8	78·5	78·5	78·5	78·4	78·0	78·1	78·4	79·6	80·8	81·5	82·3	82·4	82·5	83·0	
4	78·5	78·0	77·6	77·4	77·4	77·3	77·6	78·3	79·9	80·9	82·4	83·8	83·5	83·7	83·8	
5	79·2	79·0	79·0	78·9	78·5	78·3	78·2	79·3	80·8	81·7	82·7	83·4	84·3	84·6	84·7	
6	80·4	80·0	78·9	78·3	78·2	78·1	78·2	79·0	80·7	82·4	84·2	85·6	87·1	87·5	85·4	
7	78·7	78·6	78·0	77·6	77·3	76·9	77·0	77·3	78·9	80·5	82·3	84·4	85·8	86·3	87·2	
8	77·6	77·3	77·3	77·3	76·6	76·3	76·5	77·2	79·0	80·7	82·6	84·1	85·8	86·8	86·7	
9	77·6	77·3	76·4	76·3	75·8	75·6	75·7	76·5	78·2	79·8	81·9	83·4	85·1	85·7	86·4	
10	76·8	76·3	74·7	74·1	73·7	73·7	73·2	75·0	77·3	78·6	80·2	81·4	82·9	84·1	83·0	
11	75·8	76·3	75·8	75·3	74·6	74·3	74·5	76·1	78·2	79·7	81·3	82·5	83·4	83·6	84·3	
12	78·5	78·5	78·5	78·6	78·4	78·2	78·5	78·9	80·6	81·5	82·7	83·2	82·8	83·6	83·7	
13	78·7	78·5	78·1	77·6	77·2	76·7	77·7	78·8	80·2	81·6	82·8	83·8	85·2	85·5	85·5	
14	80·4	80·2	79·8	79·7	79·6	79·4	79·1	79·6	80·3	81·2	82·6	84·2	86·5	86·7	86·6	
15	80·1	79·5	78·8	78·5	78·2	78·5	78·8	79·6	81·3	82·8	84·1	85·2	87·4	87·7	87·4	
16	80·1	79·5	78·5	78·6	78·5	78·2	78·0	78·8	80·0	81·5	83·7	84·6	86·2	87·1	86·6	
17	78·2	77·4	77·5	77·5	76·7	76·8	76·5	77·2	78·3	80·2	82·4	84·2	85·9	86·7	86·8	
18	76·0	76·5	76·4	76·3	75·5	75·3	74·8	75·4	76·9	78·7	81·5	82·8	85·0	86·8	86·8	
19	76·2	76·5	75·8	75·5	75·3	74·6	74·6	75·8	77·6	79·0	81·5	82·8	84·7	86·7	85·5	
20	76·3	75·8	75·8	75·4	74·6	74·6	74·8	76·4	78·1	79·5	81·4	82·9	86·2	85·4	84·7	
21	75·8	75·8	76·1	75·7	75·6	74·9	74·9	75·5	77·4	79·1	81·0	82·8	84·8	86·3	85·6	
22	75·5	75·9	75·2	74·6	74·4	73·7	73·5	74·9	76·6	78·0	80·9	82·5	84·6	85·5	86·3	
23	74·9	74·6	74·4	74·2	73·6	73·4	73·5	74·5	76·0	78·2	81·0	82·8	84·5	85·1	86·0	
24	75·4	75·3	75·0	74·4	74·3	74·0	73·7	74·5	75·9	77·3	79·4	81·8	84·9	86·5	87·7	
25	76·8	76·2	75·1	74·8	74·5	74·7	75·2	76·0	78·0	79·7	82·1	83·5	84·8	86·7	87·3	
26	77·4	77·1	77·0	76·8	76·5	76·2	76·0	77·1	79·1	81·2	82·7	84·9	87·2	87·0	86·2	
27	77·6	77·2	77·1	76·6	76·3	76·2	76·3	76·9	78·8	80·6	82·9	86·0	87·6	89·2	90·0	
28	78·2	78·1	77·4	77·3	76·6	76·1	76·3	77·0	78·5	80·6	83·2	84·8	86·2	86·6	87·3	
29	76·7	76·4	75·8	75·5	74·8	74·7	75·4	76·3	78·0	79·6	82·3	83·5	84·8	85·8	86·5	
30	74·4	74·4	74·2	74·4	74·0	74·0	73·4	74·5	76·1	78·1	81·0	83·1	85·2	86·8	85·7	
Mean .	77·7	77·5	77·1	76·8	76·4	**76·1**	76·2	77·0	78·6	80·2	82·1	83·5	85·1	**85·9**	85·8	
Variation .	—2·4	—2·6	—3·0	—3·3	—3·7	**—4·0**	—3·9	—3·1	—1·5	+0·1	+2·0	+3·4	+5·0	**+5·8**	+5·7	
Mean in °C.	25·4	25·3	25·1	24·9	24·7	**24·5**	24·6	25·0	25·9	26·8	27·8	28·6	29·5	**29·9**	29·9	
Variation in °C.	—1·3	—1·4	—1·6	—1·8	—2·0	**—2·2**	—2·1	—1·7	—0·8	+0·1	+1·1	+1·9	+2·8	**+3·2**	+3·2	

DECEMBER.

1	74·6	74·6	74·5	75·0	75·1	74·5	74·5	75·1	76·5	78·6	81·3	82·7	84·5	86·1	86·7	
2	74·5	74·2	73·6	73·5	73·6	73·7	73·7	74·5	75·8	78·0	81·3	83·2	85·2	86·7	**87·4**	
3	74·0	74·2	74·5	74·4	74·3	74·0	73·9	74·9	76·6	78·6	81·5	83·6	85·6	87·0	86·4	
4	75·4	75·3	74·8	74·5	74·5	74·6	75·0	75·6	77·0	79·0	82·0	84·1	85·5	86·1	86·7	
5	74·0	74·2	74·0	73·6	73·6	73·5	73·6	74·3	75·9	77·8	80·6	82·7	84·0	84·4	84·5	
6	73·7	73·7	73·8	73·1	72·2	71·1	70·7	71·3	73·6	76·2	79·2	81·3	83·5	84·3	84·9	
7	72·5	72·2	71·7	71·7	71·2	70·7	70·8	71·8	73·2	75·4	78·1	80·2	82·4	84·2	84·7	
8	71·8	71·7	72·4	72·3	71·6	71·7	72·3	72·5	73·5	75·6	77·9	79·7	81·5	83·8	84·2	
9	72·6	72·3	72·1	71·5	70·6	69·7	69·7	70·6	73·0	75·1	77·2	79·0	81·2	83·5	82·6	
10	72·3	71·6	71·7	70·9	70·6	70·4	70·7	72·1	74·1	75·5	77·0	78·5	79·8	81·6	81·3	
11	73·6	74·0	73·6	73·5	73·3	73·1	72·6	73·3	73·8	75·2	77·2	79·2	80·7	82·4	81·9	
12	75·6	75·5	76·2	75·6	75·6	76·0	75·8	75·6	76·1	75·7	76·4	77·2	73·0	70·6	69·1	
13	67·4	67·5	68·0	67·7	68·1	67·7	67·4	68·1	69·4	69·4	72·0	74·0	73·6	72·8	71·8	
14	70·3	70·2	70·0	70·0	70·2	70·0	70·7	71·3	72·1	73·7	74·5	75·5	77·1	78·2	79·1	
15	74·1	74·2	73·6	73·0	73·2	72·7	73·1	73·5	74·4	76·4	78·3	79·8	80·3	80·7	80·4	
16	75·0	74·7	74·4	74·3	74·1	73·6	72·8	73·7	75·5	77·0	78·8	80·4	80·4	80·6	80·8	
17	73·5	73·0	72·6	72·3	71·6	71·5	71·5	72·7	74·9	76·4	78·4	80·0	82·0	82·3	82·2	
18	74·5	74·1	73·3	73·0	72·6	72·5	72·8	73·5	74·7	76·0	77·8	79·3	80·5	80·8	81·1	
19	74·4	73·7	73·0	72·6	72·2	71·7	71·6	72·7	74·9	76·5	78·6	80·1	82·5	84·1	84·2	
20	75·6	75·4	74·8	74·5	74·4	74·0	74·1	74·4	76·0	78·1	80·9	82·9	84·3	85·0	85·3	
21	73·8	74·1	73·5	73·6	74·0	74·2	73·7	73·7	74·7	77·1	79·7	82·3	83·7	83·0	82·6	
22	76·0	76·0	76·0	75·6	75·5	75·5	75·6	76·3	77·2	79·0	82·3	84·2	85·0	85·4	85·1	
23	76·5	76·2	75·0	74·8	74·2	74·3	73·1	73·9	76·5	78·4	80·3	81·9	84·2	85·1	84·5	
24	75·4	74·6	74·2	73·8	74·3	74·0	73·6	74·3	75·4	77·1	79·4	81·0	82·7	83·7	83·7	
25	73·2	72·7	73·1	73·5	72·0	71·4	71·4	72·0	73·7	75·9	78·7	80·5	82·4	84·2	85·1	
26	74·5	74·2	73·4	73·3	73·1	72·7	72·8	73·6	75·1	77·0	79·8	82·1	84·5	86·5	86·7	
27	72·7	72·5	72·3	72·6	72·6	72·4	71·2	72·3	74·6	76·7	79·5	81·6	84·0	84·4	83·0	
28	72·3	72·0	71·4	70·5	69·6	69·5	70·4	70·7	72·5	74·3	76·5	78·5	80·4	82·5	82·3	
29	71·5	70·9	70·4	70·4	70·0	69·7	69·4	69·9	71·3	73·2	75·2	77·5	79·4	80·3	80·9	
30	71·7	71·1	70·5	70·6	70·1	69·0	69·1	69·9	71·5	72·9	75·4	77·3	80·1	80·5	80·2	
31	71·1	70·6	70·4	70·1	70·0	70·0	69·7	70·2	72·0	73·4	75·5	77·4	78·5	78·8	79·5	
Mean .	73·5	73·3	73·0	72·7	72·5	**72·2**	72·2	72·9	74·4	76·1	78·4	80·2	81·7	**82·6**	82·5	
Variation .	—2·9	—3·1	—3·4	—3·7	—3·9	**—4·2**	—4·2	—3·5	—2·0	—0·3	+2·0	+3·8	+5·3	**+6·2**	+6·1	
Mean in °C. .	23·1	22·9	22·8	22·6	22·5	**22·3**	22·3	22·7	23·6	24·5	25·8	26·8	27·6	**28·1**	28·1	
Variation in °C.	—1·6	—1·8	—1·9	—2·1	—2·2	**—2·4**	—2·4	—2·0	—1·1	—0·2	+1·1	+2·1	+2·9	**+3·4**	+3·4	

(Averages for periods of sixty minutes from full hour to full hour of local mean time.)

NOVEMBER. (IN DEGREES FAHRENHEIT.)

Hours.									Mean.		Maximum.		Minimum.		Date.
15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	°F	°C	Time.	Mag.	Time.	Mag.	
											H. M.		H. M.		
85·8	83·9	82·7	82·6	82·7	82·3	80·9	80·0	79·6	**82·3**	**27·9**	13 50	**91·4**	4 20	77·4	1
79·0	78·9	79·1	79·2	79·4	79·4	79·3	79·4	79·0	78·6	25·9	3 15	80·7	5 12	76·4	2
83·1	82·1	81·2	79·9	79·5	79·0	78·8	78·5	78·5	80·0	26·7	15 0	83·5	5 58	77·9	3
83·5	82·1	81·1	80·5	80·4	80·2	80·2	79·9	79·7	80·3	26·8	11 35	84·4	5 30	77·2	4
84·6	83·7	82·7	81·8	81·4	81·1	80·8	80·7	80·4	81·2	27·3	14 12	84·9	6 10	78·0	5
84·3	82·8	81·5	80·6	80·3	79·8	79·5	79·0	78·6	81·3	27·4	13 38	88·5	5 20	77·9	6
87·1	84·6	82·7	81·5	80·8	79·6	79·2	78·7	78·2	80·8	27·1	15 16	88·2	5 25	76·6	7
85·4	83·4	81·8	80·3	79·7	79·4	79·2	78·7	77·7	80·3	26·8	13 50	87·3	5 52	76·0	8
86·3	84·8	82·9	80·7	79·2	77·7	77·4	77·2	76·8	79·8	26·6	14 35	86·6	6 10	75·3	9
83·3	81·8	80·2	79·1	78·7	78·1	77·6	77·0	76·2	**78·2**	**25·7**	13 40	84·6	6 20	**72·9**	10
84·4	83·1	81·7	80·5	80·0	79·4	78·8	78·8	78·4	79·2	26·2	15 12	84·7	6 12	74·6	11
83·6	82·8	81·6	81·4	80·7	80·4	80·1	79·3	79·4	80·6	27·0	15 0	84·3	6 10	77·8	12
84·7	84·0	83·0	82 3	81·8	81·3	80·8	80·7	80·5	81·1	27·3	14 2	85·7	5 45	76·6	13
85·2	84·0	83·1	82·3	81·8	81·4	81·2	80·8	80·6	81·9	27·7	12 42	86·8	6 50	79·0	14
87·0	85·2	83·8	83·2	82·4	81 8	81·4	80·8	80·6	82·3	27·9	13 0	88·2	4 50	78·0	15
85·7	84·4	83·1	82·2	81·4	80·8	80·6	80·2	79·1	81·6	27·6	13 52	87·7	5 58	77·6	16
85·7	83·9	82·4	81·3	81·0	80·3	79·5	78·5	77·2	80·5	26·9	14 20	87.6	6 8	76·3	17
85·2	83·9	82·2	81 3	80·6	80·2	79 5	77·9	77·0	79·7	26·5	13 36	87·5	6 28	74·4	18
84·3	83 2	81·7	80·6	80·1	79·6	78·2	77·2	76·2	79·3	26·3	13 56	86·9	6 48	74·3	19
84·5	82·9	81·4	80·5	80·0	79·3	77·9	77·2	76·7	79·3	26·3	12 50	87·5	6 20	74·3	20
84·9	82·8	81·5	80·6	79·6	78·0	77·3	76·3	75·6	79·1	26·2	13 58	86·7	5 45	74·7	21
86·2	83·0	81·2	80·2	79·5	78·4	77·7	76·3	75·2	78·7	25·9	14 52	87·0	6 15	73·2	22
85·8	84·1	81·5	79·6	79·2	78·7	77·8	76·2	75·7	78·6	25·9	14 55	86·4	6 8	73·2	23
85·6	83·9	82·2	80·8	80·5	79·8	79·3	78·6	78·3	79·1	26·2	14 45	88·4	5 58	73·5	24
86·6	84·7	82·9	81·8	81 2	80·3	79·3	78·0	77·4	79·9	26·6	14 32	87·6	4 55	74·3	25
85·2	84·1	82·5	81·4	80·8	80·2	79·4	78·2	78·3	80·5	26·9	12 45	87·8	6 15	75·6	26
88·0	85·1	83·7	82 0	81·2	80·4	79·8	78·5	78·7	81·1	27·3	15 0	90·4	5 30	75·9	27
87·4	85·9	83·5	81·9	80·7	79·4	78·6	76·6	76·3.	80·6	27·0	15 10	87·6	23 0	75·0	28
85·9	83·2	81·6	80·5	79·6	78·3	77·3	76·5	74·6	79·3	26·3	14 40	86·8	5 56	74·5	29
85·6	84·3	82·0	80·5	79·6	79·1	78·0	75·9	74·9	78·7	25·9	13 36	87·5	6 28	73·3	30
85·1	83·6	82·1	81·0	80·5	79 8	79·2	78·4	77·8	80·1	26·7					Mean.
+5·0	+3·5	+2·0	+0·9	+0·4	—0·3	—0·9	—1·7	—2·3							Variation.
29·5	28·7	27·8	27·2	26 9	26·6	26·2	25·8	25·4							Mean in °C.
+2·8	+2·0	+1·1	+0·5	+0·2	—0·1	—0·5	—0·9	—1·3							Variation in °C.

DECEMBER.

86·0	84·0	81·7	80·2	79·5	78·4	77·5	76·1	74·7	78·9	26·1	14 15	**87·1**	6 30	74·2	1
86·7	83·8	81·7	80 4	79·7	78·3	77·6	76·5	75·2	78·7	25·9	15 20	**87·7**	3 15	73·0	2
84·5	82·6	80·9	79·7	79·0	78·5	77·5	75·9	75·1	**78·6**	25·9	14 22	87·3	1 6	73·7	3
86·3	84·5	81·8	79·9	79·2	78·0	77·4	76·1	74·4	79·1	26·2	14 42	87·1	23 56	74·0	4
84 4	82·6	80·1	78·3	77·6	77·1	76·0	74·0	73·9	77·7	25·4	13 58	84·7	23 20	73·1	5
84·5	81·6	79·5	77·8	77·3	76·6	75·6	74·6	73·5	76·8	24·9	14 35	85·2	6 30	70·5	6
84·5	81·0	79·7	78·0	77·5	76·4	75·4	73·6	72·5	76·3	24·6	14 57	85·4	6 35	70·5	7
83·5	81·0	79·0	77·6	76·4	75·8	74·5	73·9	74·0	76·2	24·6	14 25	84·6	1 30	71·4	8
82·0	79·7	78·4	77·5	76·9	76·4	75·4	74·2	73·3	75·6	24·2	13 35	84·0	5 56	69·2	9
80·7	79·6	78·4	77·5	77·0	75·6	74·5	73·7	73·3	75·3	24 1	13 48	82·7	5 20	70·2	10
82·5	81·3	80·2	79·2	78·4	77·1	76·3	76·2	75·6	76·8	24 9	13 30	83·0	6 50	72·3	11
69·2	68·0	68·4	69·1	69·2	69·3	68·5	67·8	**67·4**	72·5	22·5	11 30	77·6	23 30	**67·2**	12
71·3	71·1	**71·0**	70·9	70·6	70·5	70·4	70·3	70·2	**70·1**	**21·2**	11 30	74·4	6 0	67·2	13
79·1	78·6	77·8	77·1	76·6	76·2	75·8	75·5	75·3	74·4	23·6	14 20	79·4	5 20	69·7	14
80·5	79·4	78·4	77·4	77·2	76·4	76·3	75·2	74·9	76·4	24·7	13 58	81·4	5 40	72·4	15
80·5	79·3	77·8	77·3	77·0	76·5	75·8	75·1	74·5	76·7	24 8	14 32	81·2	6 35	72·6	16
82·1	80·7	79·2	78·2	77·5	76·7	76·1	75·4	75·3	76·5	24 7	14 20	82·6	6 30	71·3	17
80·7	79·5	78·0	77·4	77·0	76·4	75·5	74·9	74·5	76·3	24·6	14 16	81·6	5 25	72·3	18
83·7	82·2	80·5	79·5	78·9	77·7	77·0	76·2	75·7	77·3	25·2	14 20	84·5	6 32	71·4	19
85·0	82·1	80·2	79·0	78·4	77·7	77·1	75·3	74·7	78·3	25·7	15 16	85·6	5 14	73·7	20
82·2	81·2	79·8	78·7	78·4	77·7	77·0	76·2	76·2	77·5	25·3	12 40	84·4	0 55	73 3	21
84·2	82·2	80 8	79·7	69·2	78·5	77·7	76·8	76·7	**79·2**	**26·2**	13 58	85·7	3 40	75·3	22
83·8	81·1	80·7	79·2	78·6	78·0	77·3	76·4	75·5	78·3	25·7	13 25	85·8	6 58	72·7	23
82·7	82·1	79·5	78·3	77·8	77·2	76·3	74·9	74·0	77·5	25·3	14 30	84·3	3 20	73·4	24
83·4	82·0	80·0	78·2	77·1	76·2	74·7	73·6	74·5	76·7	24·8	15 40	85·7	6 15	71·3	25
84·3	82·5	80·2	78·7	77·8	77·0	76·4	75·0	73·7	77·7	25·4	14 30	87·6	5 15	72·6	26
82·4	80·7	79·2	77·8	77·4	76·7	76·1	74·8	73·6	76·7	24·8	13 15	86·0	6 30	71·0	27
81·6	80·4	78·6	77·0	76·4	75·4	74·6	73·7	72·5	75·1	23 9	13 45	83·4	5 0	69·2	28
80·6	79·5	78·1	76·8	76·0	74·8	74·1	72·5	71·8	74·4	23 6	14 20	81·3	7 0	69·0	29
80·0	78·7	77·2	76·0	75·4	74·8	74·4	72·8	71·6	74·2	23·4	13 15	81·5	5 40	68·5	30
79·4	78·1	76·6	75·6	75·0	74·0	72·8	71·8	71·3	73·8	23·2	14 54	79·8	6 3	69·5	31
82·1	80·4	78·8	77·7	77·1	76·3	75·5	74·5	73·9	76·4	24·7					Mean.
+5·7	+4·0	+2·4	+1·3	+0·7	—0·1	—0·9	—1·9	—2·5							Variation.
27·8	26 9	26·0	25·4	25·1	24·6	24·2	23·6	23·3							Mean in °C.
+3·1	+2·2	+1·3	+0·7	+0·4	—0·1	—0·5	—1·1	—1·4							Variation in °C.

JANUARY. (THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours.												
	0—1	1 2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13
1	63	69	65	63	67	61	60	62	58	57	53	46	45
2	84	83	84	80	72	72	68	68	65	63	57	50	45
3	78	79	76	74	71	72	72	67	68	66	57	47	43
4	76	75	78	73	80	79	79	78	62	54	43	29	32
5	62	63	67	69	65	66	68	67	57	51	45	43	44
6	68	70	65	63	68	69	72	65	66	65	62	51	43
7	82	83	80	80	80	81	78	79	75	73	72	67	59
8	81	79	79	76	82	83	80	76	71	73	64	66	65
9	79	77	75	74	69	68	76	81	70	58	57	59	59
10	74	73	80	82	84	83	83	77	70	68	66	61	58
11	69	67	70	73	75	69	66	63	59	58	58	56	56
12	78	77	82	80	75	77	80	80	75	66	57	50	50
13	67	70	73	71	61	69	68	67	69	66	58	55	52
14	78	81	83	78	70	72	70	74	69	65	61	55	46
15	78	73	75	80	71	71	77	78	74	70	67	59	45
16	74	79	75	71	66	69	68	73	68	65	61	51	51
17	72	74	76	69	70	70	75	78	67	68	60	47	40
18	81	77	75	72	68	64	66	60	70	66	59	49	53
19	71	67	55	54	57	57	58	59	56	55	53	51	50
20	69	70	72	71	73	74	63	63	66	66	60	55	54
21	80	81	77	75	78	75	71	64	57	52	54	48	49
22	71	72	73	76	73	74	74	75	70	53	58	53	51
23	60	65	73	76	74	80	75	69	65	57	53	52	52
24	70	71	72	68	71	72	71	71	66	62	63	62	57
25	76	79	77	78	79	80	81	81	77	75	67	62	56
26	68	70	70	70	68	70	70	69	63	58	55	52	50
27	58	58	66	58	57	54	60	62	66	60	58	56	55
28	83	81	76	82	80	76	75	73	72	67	63	63	57
29	80	81	83	80	79	75	82	83	75	59	52	51	55
30	72	75	80	77	80	75	74	71	67	64	56	52	46
31	62	58	55	49	54	56	55	65	61	58	44	43	45
Mean .	73·0	73 5	73·8	72·3	71·5	71·4	71·5	70·9	66·9	62·5	57·8	52·9	50·4
*Mean Vapour Pressure in inches of mercury.	·597	·597	·592	·572	·558	·548	·543	·550	·557	·560	·561	·545	·550

FEBRUARY.

1	75	64	61	59	57	63	58	69	69	63	56	45	49
2	71	73	69	74	74	74	77	77	70	59	56	55	62
3	69	69	68	70	61	62	61	66	59	50	48	46	45
4	52	55	51	46	47	52	51	47	41	43	43	42	43
5	53	49	45	45	44	42	42	42	42	37	41	39	39
6	65	65	66	65	70	76	69	72	66	60	59	60	57
7	84	85	84	82	85	85	76	75	69	65	62	68	72
8	85	85	85	85	86	88	90	90	86	83	73	68	67
9	55	61	65	61	57	66	59	56	48	54	52	45	50
10	68	69	72	73	66	65	68	65	57	48	50	48	47
11	63	65	62	57	51	59	64	56	51	54	48	52	52
12	70	73	76	74	66	67	67	64	57	51	52	56	56
13	71	70	67	66	72	72	72	69	66	67	62	62	59
14	79	81	81	81	79	79	79	72	70	69	59	54	58
15	56	64	64	73	79	76	72	73	60	58	55	53	60
16	70	72	73	68	67	71	80	83	80	70	60	54	56
17	77	79	81	83	88	88	89	88	78	71	64	60	61
18	76	76	81	78	76	78	79	74	65	64	60	54	50
19	64	66	67	73	69	69	67	66	57	55	54	55	55
20	74	77	80	84	83	79	81	79	76	70	64	58	53
21	81	83	82	80	80	78	74	79	74	68	63	57	65
22	81	81	80	81	79	83	79	76	73	68	65	61	62
23	80	83	81	81	80	82	81	77	74	72	61	58	62
24	74	74	80	83	83	82	81	81	76	68	61	60	54
25	69	73	76	79	80	80	80	79	75	68	65	62	60
26	80	80	82	80	80	78	77	75	64	62	61	55	54
27	69	69	74	75	72	67	72	65	50	51	48	47	47
28	58	67	75	74	73	73	65	60	50	37	40	41	43
Mean .	70·3	71·7	72·4	72·5	71·6	72·6	71·8	70·5	64·4	60·2	56·6	54·1	54·6
*Mean Vapour Pressure in inches of mercury.	·574	·575	·573	·568	·550	·550	·536	·539	·540	·543	·549	·553	·574

*Computed from mean temperatures and mean relative humidities.

JANUARY. (THE FIGURES REPRESENT PERCENTAGES.)

Hours.											Mean.	* Mean Vapour Presure in inches of mercury.	Date.
13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			
												"	
44	53	66	67	72	74	72	72	75	77	79	68·3	·612	1
48	60	68	71	71	72	72	75	74	76	75	68·9	·677	2
49	51	55	63	70	67	64	66	71	60	68	64·7	·637	3
38	42	46	56	61	69	66	61	60	55	59	60·5	·557	4
45	39	35	36	46	68	62	62	61	56	68	**56·0**	·536	5
48	48	52	59	66	71	72	74	77	83	82	65·0	·634	6
64	59	70	76	74	79	82	84	**85**	84	84	**76·3**	·742	7
67	67	67	68	70	71	72	76	79	79	80	73·8	·697	8
63	62	65	68	71	74	80	79	83	77	74	70·7	·648	9
58	61	63	67	73	75	76	72	73	71	71	71·6	·622	10
57	60	62	66	70	73	74	75	70	74	77	66·5	·573	11
56	59	64	64	65	68	71	71	66	63	63	63·2	·597	12
53	58	60	63	69	73	73	77	78	75	76	66·7	·592	13
55	59	58	65	70	76	77	79	79	77	79	69·8	·640	14
55	58	61	66	72	77	76	76	76	77	67	70·0	·637	15
50	51	55	67	69	68	66	59	59	72	74	65·0	·596	16
37	42	52	58	63	68	72	75	71	70	77	64·6	·606	17
55	59	62	62	64	63	66	64	63	70	69	64·9	·597	18
51	52	62	67	70	73	70	71	65	68	69	60·9	·562	19
49	44	57	67	69	73	73	77	76	74	78	66·4	·617	20
54	56	59	63	67	71	73	70	68	68	70	65·8	·597	21
47	53	58	61	64	67	67	68	72	63	60	64·7	·587	22
54	54	50	51	52	56	58	56	62	67	69	61·7	·542	23
55	52	52	54	54	57	62	64	69	74	76	64·4	·545	24
61	62	63	65	69	71	68	67	70	67	66	70·7	·600	25
50	51	54	51	56	64	63	63	65	60	62	61·3	·503	26
57	55	61	64	69	74	77	75	72	76	83	63·8	·547	27
55	53	61	66	66	67	67	73	68	68	74	69·4	·620	28
58	59	58	64	70	70	70	68	70	77	76	69·8	·601	29
49	47	51	56	59	62	62	65	70	64	58	63·8	·519	30
47	47	51	55	59	63	67	72	75	79	79	58·3	·468	31
52·5	54·0	58·0	62·1	65·8	69·5	70·0	70·5	71·0	71·0	72·3	66·0	·597	Mean.
"	"	"	"	"	"	"	"	"	"	"	"		*Mean Vapour Pressure in inches of mercury.
·582	·599	·630	·649	·651	**·654**	·646	·636	·621	·603	·600	·592		

FEBRUARY.

50	52	55	60	65	71	73	75	71	65	71	62·3	·538	1
55	55	60	66	67	68	70	72	69	71	68	67·2	·608	2
48	50	49	49	54	59	66	62	61	51	51	57·3	·510	3
44	49	49	55	53	56	59	57	59	60	59	**50·5**	**·423**	4
51	52	52	54	55	59	68	68	68	70	70	51·1	·441	5
54	55	56	57	62	72	74	79	83	83	82	67·0	·592	6
65	61	60	65	70	74	75	75	79	81	86	**74·3**	**·692**	7
63	48	47	48	50	48	48	53	57	56	60	68·7	·601	8
52	53	54	55	57	60	62	59	57	60	68	56·9	·475	9
53	57	57	56	56	51	53	56	55	53	50	58·0	·506	10
52	50	52	54	56	57	56	61	60	56	62	56·3	·511	11
56	56	54	56	59	64	35	69	67	68	67	62·9	·577	12
62	58	61	67	72	77	76	78	79	79	80	69·3	·629	13
61	60	63	64	64	66	69	70	70	65	62	69·0	·639	14
59	63	65	64	65	66	64	66	68	71	75	65·4	·610	15
63	65	65	66	70	69	69	72	75	77	79	69·7	·650	16
61	61	59	58	59	63	63	64	67	71	77	71·3	·649	17
53	56	57	58	61	65	67	69	70	73	72	67·2	·600	18
54	54	53	55	58	62	62	68	69	74	75	62·5	·549	19
47	45	45	47	49	56	61	66	70	74	80	66·6	·585	20
57	60	61	64	67	72	74	77	76	76	80	71·6	·635	21
61	60	63	66	71	74	75	75	75	77	78	72.7	·643	22
61	60	56	57	63	63	64	66	72	74	74	70·1	·618	23
54	54	57	58	58	57	54	54	56	62	66	66·3	·576	24
62	60	59	66	68	69	72	74	77	76	77	71·1	·600	25
56	58	57	51	50	54	56	60	64	54	57	64·4	·558	26
47	47	47	47	55	60	63	65	68	70	62	59·9	·542	27
49	50	51	51	55	58	61	63	61	54	51	56·7	·527	28
55·4	55·3	55·9	57·6	60·3	63·2	65·0	66·9	68·0	67·9	69·3	64·5	·574	Mean.
"	"	"	"	"	"	"	"	"	"	"	"		*Mean Vapour Pressure in inches of mercury.
·589	·590	·592	·589	·583	·583	·590	**·595**	·595	·579	·577	·570		

* Computed from mean temperatures and mean relative humidities.

MARCH. (THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours.												
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—12
1	53	55	60	62	67	60	51	56	46	33	40	42	54
2	77	82	79	77	77	80	81	79	75	67	66	68	65
3	83	83	85	85	87	86	87	84	80	77	69	66	67
4	73	74	75	77	78	79	79	76	71	69	64	65	66
5	51	55	52	62	64	61	63	53	43	35	41	36	34
6	53	54	59	55	55	49	48	51	50	41	36	43	46
7	74	75	68	70	79	80	82	80	75	74	69	60	56
8	80	76	81	81	81	79	80	76	72	66	68	67	63
9	72	73	74	76	78	76	77	74	71	68	62	60	61
10	82	82	83	85	85	85	88	83	81	77	73	66	69
11	72	81	85	81	81	83	80	77	72	67	61	58	50
12	61	72	75	77	77	76	77	76	71	62	47	50	59
13	85	86	88	85	86	84	81	81	77	77	72	57	62
14	74	76	72	73	76	78	81	77	71	61	55	55	54
15	74	76	77	78	79	77	78	78	72	70	71	69	68
16	81	82	83	83	84	79	76	74	58	57	53	52	52
17	73	75	78	77	76	77	79	77	70	57	55	55	58
18	69	67	67	70	70	71	63	55	48	44	43	43	47
19	67	67	71	72	72	73	72	70	70	68	67	65	63
20	84	84	88	86	86	85	84	84	79	78	76	73	71
21	87	88	88	87	89	88	84	84	78	68	64	68	65
22	80	82	80	82	76	72	74	71	62	57	61	63	59
23	77	77	77	81	83	82	79	75	69	68	71	71	67
24	83	84	86	86	86	86	86	84	80	77	74	73	69
25	83	84	84	84	85	85	86	82	79	75	74	71	68
26	82	82	82	82	81	81	80	80	76	74	71	69	69
27	80	80	81	80	80	80	84	83	79	78	74	73	71
28	85	83	82	83	77	76	78	72	65	72	72	71	70
29	83	82	82	84	87	86	87	84	78	77	71	69	69
30	84	83	83	84	86	87	86	84	80	77	75	73	70
31	82	82	84	84	80	76	75	70	66	60	51	52	60
Mean .	75·6	76·8	77.7	78·4	79·0	78·0	77·6	75·2	69·8	65·5	62·8	61·4	61·4
*Mean Vapour Pressure in inches of mercury.	" ·671	" ·677	" ·675	" ·673	" ·666	" ·651	" ·646	" ·653	" ·657	" ·656	" ·667	" ·674	" .687

APRIL.

1	87	86	84	84	84	84	84	84	81	78	76	78	77
2	87	86	84	83	87	86	82	85	76	74	70	72	75
3	85	86	85	84	86	86	83	84	78	69	59	63	61
4	81	81	78	80	75	70	76	70	64	60	53	50	54
5	74	74	69	65	63	66	71	65	58	58	61	59	58
6	82	80	80	78	76	78	83	83	75	71	69	68	65
7	81	83	84	84	86	84	84	82	76	73	70	68	67
8	78	78	76	78	82	82	83	81	75	72	68	67	65
9	81	81	80	80	80	80	80	81	75	71	68	64	65
10	83	83	82	85	87	86	86	80	73	64	64	62	65
11	72	75	73	74	75	75	75	71	70	65	66	66	62
12	86	85	89	82	85	86	84	78	59	65	70	69	70
13	85	84	86	85	84	84	85	78	72	69	66	64	69
14	83	83	83	79	80	79	84	82	80	80	77	72	65
15	82	83	83	83	85	87	86	84	80	77	75	75	71
16	83	84	85	82	82	82	82	80	77	72	69	65	65
17	82	80	83	83	82	83	83	80	75	70	69	67	66
18	80	83	81	79	78	79	77	74	73	69	70	68	67
19	79	75	79	76	78	81	79	76	74	74	73	72	69
20	62	64	67	67	65	65	62	56	54	47	53	54	52
21	66	66	71	76	80	81	82	74	72	77	71	67	67
22	84	85	86	86	85	85	84	79	72	62	61	67	67
23	86	85	85	86	86	87	86	82	75	74	71	69	66
24	71	71	74	77	80	80	81	78	76	74	72	68	69
25	78	77	78	80	83	83	83	79	74	71	66	64	64
26	72	75	78	79	81	77	80	79	77	77	72	69	66
27	68	68	74	75	75	75	76	67	57	56	60	54	41
28	74	76	78	77	75	72	66	60	52	51	50	50	52
29	75	78	75	78	80	81	81	78	74	69	68	69	69
30	75	75	77	77	79	80	79	78	74	72	68	64	66
Mean .	78·7	79·0	79·6	79·4	80·1	80·1	80·2	76·9	71·6	68·7	66·8	65·5	64·5
*Mean Vapour Pressure in inches of mercury.	" ·845	" ·842	" ·840	" ·830	" ·827	" ·824	" ·839	" ·850	" ·849	" ·852	" ·855	" ·852	" ·853

*Computed from mean temperatures and mean relative humidities.

MARCH. (THE FIGURES REPRESENT PERCENTAGES.)

Hours.											Mean.	*Mean Vapour Pressure in inches of mercury.	Date.
13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			
												"	
56	56	55	59	63	66	67	68	69	69	68	57·3	·547	1
63	62	63	61	67	69	73	76	79	81	81	72·8	·672	2
66	63	62	55	60	65	65	68	64	72	72	73·0	·645	3
58	51	48	44	44	51	51	56	60	58	51	63·3	·558	4
39	46	50	51	51	51	52	52	57	53	50	**50·1**	**·444**	5
48	48	50	53	57	63	68	72	72	75	78	55·2	·466	6
54	50	52	58	63	64	66	68	72	77	79	68·5	·605	7
60	58	59	60	62	65	62	66	68	68	72	69·6	·649	8
62	63	61	64	66	69	73	77	79	79	81	70·7	·653	9
61	58	62	66	71	75	76	73	77	73	72	75·1	·693	10
50	57	61	61	60	55	55	59	60	49	55	65·4	·640	11
58	61	65	65	70	74	78	81	82	83	84	70·0	·668	12
57	57	60	63	63	65	66	66	69	71	71	72·0	·673	13
51	49	49	53	56	63	64	66	65	68	70	64·9	·593	14
68	68	68	70	70	73	73	71	73	79	82	73·4	·658	15
58	62	63	64	61	66	72	75	77	74	69	69·0	·680	16
53	49	51	51	50	52	53	50	50	47	60	61·4	·623	17
50	55	53	53	58	62	65	66	68	69	68	59·3	·610	18
64	66	66	69	71	76	79	81	82	83	84	71·6	·722	19
71	70	70	73	75	78	81	83	86	86	86	**79·9**	**·806**	20
61	61	59	62	68	73	74	77	78	80	80	75·5	·771	21
54	52	54	55	53	50	52	58	64	76	75	65·1	·672	22
66	65	63	67	72	72	76	79	80	81	83	74·2	·732	23
65	64	63	65	68	75	77	76	80	82	81	77·1	·767	24
68	70	70	75	78	80	81	82	82	84	82	78·8	·795	25
67	69	73	74	77	79	81	82	82	82	80	77·3	·762	26
71	70	73	76	78	82	83	83	83	82	84	78·7	·781	27
69	66	68	69	71	77	81	82	83	84	84	75·8	·762	28
69	68	66	63	66	72	72	75	78	81	82	76·3	·776	29
68	68	68	66	67	72	73	74	76	78	80	76·7	·794	30
61	65	66	71	74	79	81	84	84	85	87	73·3	·792	31
60·2	**60·2**	61·0	62·5	64·8	68·2	70·0	71·8	73·5	74·5	75·2	70·0	·678	Mean.
"	"	"	"	"	"	"	"	"	"	"	"		*Mean Vapour Pressure in inches of mercury.
·680	·678	·678	·679	·673	·674	·677	·681	·685	·681	·678	·672		

APRIL.

74	73	74	73	79	81	83	84	83	84	86	**80·9**	·863	1
73	73	73	74	73	79	81	82	82	83	85	79·4	·866	2
62	63	63	64	67	71	71	71	75	76	79	73·8	·797	3
52	52	54	56	61	65	65	67	70	73	74	65·9	**·731**	4
60	62	62	65	69	73	76	79	83	82	81	68·0	·747	5
65	66	68	72	75	79	82	84	85	83	81	76·2	·834	6
68	68	68	70	73	76	76	79	78	78	79	76·5	·837	7
66	65	67	70	73	77	79	77	78	80	80	74·9	·833	8
65	66	66	70	75	78	79	80	82	83	84	75·6	·825	9
62	62	62	62	65	69	69	73	74	72	70	72·5	·811	10
59	56	61	65	71	79	80	81	80	83	84	71·6	·812	11
71	71	69	70	75	79	81	83	83	83	83	77·3	·877	12
67	63	67	71	74	78	80	82	83	86	85	77·0	**·925**	13
66	67	71	74	78	84	82	83	83	80	79	78·1	·917	14
67	65	65	64	63	74	75	77	79	81	81	76·7	·895	15
64	62	61	64	70	76	79	82	83	83	83	75·6	·871	16
67	67	68	71	75	79	81	83	83	84	82	76·8	·888	17
67	68	66	61	62	68	74	70	70	70	75	72·0	·854	18
62	55	52	52	49	51	57	64	67	64	59	67.4	·844	19
49	49	51	52	54	60	64	72	75	71	68	**59·7**	·767	20
66	64	63	65	69	76	79	80	83	87	88	73·7	·897	21
68	70	70	72	73	78	79	79	83	85	86	76·9	·924	22
64	63	61	58	60	61	66	68	69	71	69	72·8	·872	23
68	70	70	72	74	76	76	75	74	75	79	74·2	·903	24
63	61	55	60	61	65	67	66	65	67	70	70·0	·877	25
60	55	55	58	61	65	69	69	66	67	67	69·7	·870	26
44	44	45	48	49	55	61	65	67	68	71	61·0	·781	27
54	58	60	63	65	67	70	71	74	71	72	64·9	·808	28
67	67	67	68	70	72	71	76	79	79	79	73·7	·877	29
64	64	66	63	65	68	68	63	65	72	75	70·7	·847	30
63·5	**63·0**	63·3	64·9	67·6	72·0	74·0	75·5	76·7	77·4	77·8	72·8	·848	Mean.
"	"	"	"	"	"	"	"	"	"	"	"		*Mean Vapour Pressure in inches of mercury.
·850	·843	·842	·836	·836	·849	·853	·853	**·856**	·852	·849	·845		

*Computed from mean temperatures and mean relative humidities.

MAY. (THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours.												
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13
1	77	79	80	79	80	79	77	75	70	68	69	68	68
2	79	79	80	81	82	83	83	82	77	74	74	71	68
3	84	85	87	87	87	87	84	80	72	73	70	70	69
4	85	86	85	85	87	86	83	79	73	70	67	69	68
5	80	81	81	81	83	83	82	77	73	69	66	66	66
6	82	82	80	81	82	83	82	79	76	72	72	69	67
7	83	83	83	85	85	86	84	81	76	74	72	69	68
8	81	81	80	80	81	81	79	78	73	70	69	67	66
9	75	75	75	76	77	77	76	73	68	65	63	61	61
10	74	75	76	75	75	75	74	71	67	68	64	63	62
11	74	75	74	74	76	77	75	71	69	67	64	61	61
12	68	69	69	70	70	67	66	65	65	63	62	60	60
13	75	77	77	77	76	76	75	73	69	67	66	66	63
14	77	77	75	75	78	76	76	73	70	64	62	62	60
15	69	69	70	71	70	71	68	64	61	58	58	56	56
16	69	67	67	67	68	68	67	62	62	59	57	56	56
17	74	75	74	74	78	78	76	71	66	63	62	61	58
18	71	70	69	69	69	73	68	65	63	61	59	58	58
19	73	74	73	73	74	73	71	68	66	65	61	61	59
20	70	71	69	70	72	72	71	69	67	63	61	60	60
21	75	76	76	77	77	77	76	75	76	69	66	63	63
22	76	77	78	79	78	79	77	74	70	68	66	64	64
23	77	77	78	79	79	79	77	74	69	68	66	65	66
24	83	82	83	83	83	83	83	80	75	71	70	69	68
25	79	79	79	79	81	81	79	76	71	68	67	65	63
26	77	78	78	78	77	77	77	74	70	67	66	64	63
27	71	70	70	71	71	72	70	69	65	63	61	59	57
28	74	73	73	73	72	73	70	70	67	65	64	64	61
29	71	72	72	74	74	74	74	72	69	67	60	58	57
30	76	75	73	74	77	77	76	73	66	65	62	60	60
31	77	77	77	77	78	79	78	75	71	68	63	62	61
Mean .	76·0	76·3	76·2	76·6	77·3	77·5	75·9	73·2	69·4	66·8	64·8	63·5	62·5
*Mean Vapour Pressure in inches of mercury.	·873	·868	·861	·858	·860	·859	·861	·865	·866	·866	·867	·872	·872

JUNE.

1	79	79	79	79	80	79	81	79	73	72	69	68	68
2	73	79	81	80	79	78	76	75	71	70	70	72	67
3	80	81	80	81	80	80	79	76	73	71	69	68	67
4	81	81	82	82	81	82	81	79	76	73	71	69	67
5	80	80	79	79	80	80	80	77	74	71	69	67	65
6	77	77	77	78	77	78	77	73	70	68	65	63	62
7	75	76	76	74	74	75	74	69	67	65	63	61	60
8	74	75	73	73	74	74	73	70	66	65	62	61	59
9	75	75	74	73	73	74	74	72	69	66	65	64	62
10	75	74	74	76	78	78	78	75	75	73	68	65	65
11	76	77	71	70	71	71	71	67	64	64	65	66	66
12	75	73	72	73	75	74	76	74	68	67	66	68	68
13	83	84	84	88	87	86	84	85	85	82	87	87	87
14	89	89	89	91	91	91	91	91	91	93	91	91	93
15	81	82	83	83	84	84	85	84	81	80	79	77	80
16	85	85	85	86	87	87	86	84	80	77	76	74	73
17	84	83	83	83	85	85	84	81	80	76	74	73	73
18	80	81	84	82	83	82	82	80	76	74	71	69	68
19	80	80	80	79	79	79	80	79	76	74	75	75	75
20	79	79	79	79	78	79	78	78	76	74	73	70	68
21	78	79	79	79	78	79	79	76	80	82	82	89	84
22	80	79	83	79	76	76	76	76	72	70	65	66	66
23	74	76	76	76	75	74	73	73	71	67	66	66	63
24	74	74	75	74	76	76	75	72	71	69	69	66	65
25	76	75	76	76	74	77	85	84	83	76	71	69	68
26	80	80	80	79	80	79	81	82	80	81	80	78	75
27	76	76	76	76	77	85	86	85	81	79	78	73	69
28	81	81	85	87	87	87	87	87	88	90	91	93	91
29	85	85	85	85	85	86	89	89	89	91	88	89	88
30	91	92	92	91	90	88	89	82	87	90	85	87	86
Mean .	79·2	79·6	79·7	79·7	79·8	80·1	80·3	78·5	76·4	75·0	73·4	72·8	71·6
*Mean Vapour Pressure in inches of mercury.	·930	·929	·927	·918	·920	·920	·928	·931	·937	·939	·946	·950	·949

* Computed from mean temperatures and mean relative humidities.

MAY. (THE FIGURES REPRESENT PERCENTAGES.)

Hours.											Mean.	*Mean Vapour Pressure in inches of mercury.	Date.
13—14	14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			
												"	
68	66	67	70	75	79	80	81	81	80	79	74·8	·862	1
69	68	69	69	72	77	81	83	84	85	83	77·2	·922	2
67	67	68	71	72	76	79	81	82	83	84	77·7	·931	3
65	68	69	70	72	78	79	81	81	80	79	76·9	·915	4
64	64	65	67	72	76	79	81	82	82	81	75·0	·901	5
68	67	68	69	74	78	81	83	83	84	83	76·9	·929	6
66	68	68	70	73	78	79	80	79	80	81	77·1	·944	7
66	68	67	68	71	69	76	77	76	76	75	74·0	·921	8
63	63	63	64	67	70	71	72	74	74	74	69·9	·870	9
60	61	63	64	67	69	70	72	74	74	75	69·5	·873	10
58	57	58	61	62	67	69	70	69	68	68	67·7	·842	11
58	59	60	63	66	69	70	72	73	75	75	66·4	·827	12
63	63	63	66	68	71	73	75	75	76	76	70·9	·899	13
60	59	61	62	64	65	66	70	69	68	69	63·3	·861	14
57	56	57	58	63	63	64	68	67	69	67	63.7	·783	15
56	55	58	60	63	66	68	69	71	72	74	64·0	·776	16
56	58	58	60	62	66	69	70	71	71	71	67.6	·815	17
56	58	58	60	63	67	69	71	73	73	73	65·6	·800	18
60	60	60	61	64	66	68	70	70	70	71	67·0	·821	19
60	61	61	62	65	69	71	72	74	74	75	67·5	·837	20
63	63	64	66	69	72	·74	76	76	77	77	71·8	·888	21
64	64	64	66	70	74	76	76	77	77	76	72·3	·908	22
66	67	69	71	74	80	82	83	85	83	83	74·9	·943	23
68	68	68	70	72	76	78	79	79	79	79	76·2	·973	24
63	62	63	65	67	73	75	76	77	77	76	72·5	·917	25
62	61	63	65	67	69	71	72	73	74	74	70·7	·884	26
58	58	57	64	63	68	71	73	73	73	73	66·7	·835	27
59	57	60	62	66	68	69	72	72	73	73	67·9	·855	28
59	57	57	60	63	69	71	72	72	73	74	67·5	·859	29
60	62	63	65	67	71	70	74	76	76	76	69·7	·890	30
60	60	62	66	69	71	71	73	73	73	76	70.7	·914	31
62.0	62·1	62·9	65·0	67·8	71·3	73·2	75·0	75·5	75·8	75·8	70·9	·877	Mean.
"	"	"	"	"	"	"	"	"	"	"	"		
·873	·877	·880	**·884**	·885	·882	·885	**·895**	·893	·888	·882	·874		*Mean Vapour Pressure in inches of mercury.

JUNE.

66	66	68	69	68	67	75	73	73	73	71	73·1	·898	1
67	67	68	68	69	73	76	78	80	80	80	74·0	·924	2
67	67	69	71	74	80	81	81	80	80	81	75·7	·969	3
65	65	67	69	74	79	80	80	80	79	79	75·9	·984	4
63	64	65	67	70	74	74	76	76	78	77	73·5	·956	5
62	62	61	63	66	69	71	71	73	73	75	70·3	·906	6
59	60	61	63	65	68	70	72	73	74	73	68·6	**·881**	7
60	60	61	62	65	69	71	74	74	74	74	**68·5**	·889	8
61	62	63	62	64	68	70	71	74	76	76	69·3	·913	9
67	70	71	72	73	76	77	77	78	76	75	73·6	·952	10
67	68	70	71	74	76	78	78	77	76	76	71·3	·910	11
69	69	71	73	74	75	76	80	81	81	81	73·3	·912	12
89	87	88	87	85	84	87	88	88	88	84	86·0	·966	13
91	92	88	91	91	90	86	84	87	83	85	**89.5**	·882	14
80	79	80	80	84	85	85	87	86	86	86	82·5	·937	15
74	75	74	76	79	80	80	82	82	83	83	80·5	**1.003**	16
73	71	70	71	72	76	77	78	78	81	80	78·0	·993	17
66	65	66	68	69	71	74	75	76	78	80	75·0	·967	18
71	68	69	71	72	74	74	76	76	78	78	75·7	·966	19
68	71	73	73	73	76	76	78	79	78	80	75·6	·953	20
81	79	84	82	81	84	81	79	79	78	79	80·1	·944	21
65	63	62	69	71	74	75	76	76	76	75	72·7	·919	22
64	64	65	64	67	69	71	72	72	73	73	70·1	·892	23
67	67	66	67	70	72	71	73	73	74	76	71·4	·911	24
65	67	67	67	70	70	72	82	79	76	79	74·3	·913	25
69	70	73	74	71	74	78	78	78	79	76	77·3	·935	26
68	66	66	69	68	69	72	75	75	74	78	74·9	·926	27
91	90	90	89	85	85	85	84	84	86	85	87·0	·907	28
85	81	81	82	83	85	87	83	84	89	87	85·9	·922	29
89	91	92	93	91	86	79	83	88	78	84	87·7	·896	30
71·0	70.9	71·6	72·8	73·9	75·9	77·0	78·1	78·6	78·6	78·9	76·4	·931	Mean.
"	"	"	"	"	"	"	"	"	"	"	"		
·945	·943	·941	·935	·929	·930	·931	·932	·932	·926	·927	·933		*Mean Vapour Pressure in inches of mercury.

* Computed from mean temperatures and mean relative humidities.

JULY. (THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours.													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
1	89	89	88	86	87	89	90	89	88	92	92	90	83	89
2	90	89	87	89	91	90	88	91	90	91	85	91	90	93
3	86	86	85	85	83	85	85	86	84	81	81	84	87	85
4	87	87	87	84	87	86	86	87	85	86	84	83	82	83
5	90	89	90	90	91	91	91	88	87	89	87	87	90	91
6	94	91	92	94	92	92	93	92	92	93	91	91	91	87
7	91	91	91	91	89	91	91	91	91	91	88	87	83	81
8	85	90	88	86	84	84	82	83	81	81	80	80	83	79
9	85	87	85	84	83	83	85	83	80	79	84	81	85	86
10	83	81	85	85	87	85	88	85	84	85	85	83	81	87
11	84	83	83	83	84	84	85	83	87	83	87	85	84	84
12	87	86	86	85	84	83	84	83	86	83	82	81	81	83
13	87	84	86	85	86	85	83	87	87	87	82	82	79	80
14	88	89	90	87	85	83	88	86	88	87	87	86	89	85
15	91	89	92	93	95	90	93	95	92	92	92	91	93	93
16	94	94	94	95	94	93	93	94	92	90	88	90	89	89
17	89	88	88	90	89	88	87	88	90	78	90	91	88	84
18	90	90	91	91	91	89	91	90	91	88	85	85	85	81
19	87	85	90	91	89	90	91	91	88	85	87	90	87	85
20	90	89	89	90	91	91	91	90	89	87	85	85	83	83
21	87	88	90	88	87	87	87	87	88	87	90	89	88	87
22	88	88	88	87	88	87	85	86	87	84	83	85	86	87
23	89	88	88	88	88	88	89	88	88	84	81	82	84	82
24	85	87	91	89	88	86	86	89	89	84	83	81	81	79
25	87	90	86	87	82	83	87	91	91	93	91	91	94	93
26	91	91	91	91	92	92	92	91	92	91	89	88	91	90
27	93	92	91	91	91	91	91	90	86	85	85	83	83	82
28	85	87	88	87	87	87	85	86	85	83	83	83	79	79
29	87	89	88	87	87	89	91	89	91	91	91	92	92	93
30	87	87	89	88	87	91	92	91	91	91	90	90	90	89
31	91	89	89	86	90	89	91	92	92	89	89	89	93	97
Mean . .	88·3	88·2	88·6	88·2	88·0	87·8	88·4	88·5	88·1	87·3	86·4	86·3	86·3	86·0
*Mean Vapour Pressure in inches of mercury.	·917	·916	·920	·916	·911	·903	·906	·919	·927	·937	·945	·941	·941	·935

AUGUST.

1	92	94	93	93	93	93	95	96	97	97	97	94	94	91
2	91	91	89	89	89	90	91	89	87	85	88	87	83	83
3	85	86	87	87	87	87	90	88	87	85	81	79	79	81
4	83	82	83	83	83	83	83	85	82	85	79	79	79	79
5	87	86	87	92	88	89	91	91	87	87	83	83	81	81
6	89	88	88	88	88	86	86	85	84	83	91	91	89	86
7	86	89	90	93	93	93	94	94	93	94	89	89	91	94
8	96	96	95	95	96	95	95	95	95	93	95	95	94	95
9	95	94	91	91	90	90	89	87	87	88	88	85	83	84
10	83	87	86	87	86	86	87	86	85	84	89	90	90	89
11	87	87	87	87	87	88	89	89	87	89	87	84	86	83
12	85	84	84	84	85	87	87	86	84	84	83	83	82	83
13	84	87	85	84	84	83	83	85	83	82	81	80	81	80
14	87	90	88	88	89	92	91	90	90	89	85	80	79	79
15	88	88	89	89	88	89	88	89	88	87	92	88	85	83
16	89	88	90	90	88	89	89	85	89	87	89	87	87	86
17	90	90	91	91	90	89	87	86	85	83	82	87	83	84
18	89	87	84	84	85	87	90	86	87	84	84	89	86	85
19	86	86	87	83	87	85	95	84	81	80	85	83	81	82
20	87	87	84	87	85	87	84	81	81	85	83	80	80	85
21	85	85	85	84	86	87	86	87	88	92	89	87	89	89
22	89	89	88	88	90	87	89	85	86	84	83	83	83	83
23	88	87	87	87	87	84	87	91	86	85	87	86	84	87
24	89	89	91	90	89	89	89	88	91	93	92	89	85	83
25	87	87	87	87	87	88	88	86	83	82	80	81	78	73
26	83	86	87	87	87	87	87	86	82	85	71	76	82	83
27	85	84	85	90	91	89	88	89	84	85	83	83	78	79
28	90	91	89	89	89	90	86	86	88	87	80	82	80	82
29	91	89	88	87	87	88	91	91	90	86	84	83	82	81
30	89	88	89	87	86	88	87	87	87	89	84	82	84	82
31	88	87	88	86	85	85	85	87	85	83	80	80	79	75
Mean . .	87·9	88·0	87·8	88·0	87·9	88·1	88·3	87·8	86·7	86·5	85·3	84·7	83·8	83·5
*Mean Vapour Pressure in inches of mercury.	·898	·890	·897	·893	·892	·889	·894	·897	·904	·916	·918	·930	·926	·926

*Computed from mean temperatures and mean relative humidities.

JULY. (THE FIGURES REPRESENT PERCENTAGES.)

Hours. 14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	Mean.	*Mean Vapour Pressure in inches of Mercury.	Date.
											"	
91	91	92	91	89	87	90	89	89	89	89·1	·873	1
90	83	80	88	87	86	84	85	87	87	88·0	·893	2
84	87	83	84	87	91	89	89	87	87	85·5	**·979**	3
83	83	83	83	83	83	81	86	81	89	84·5	·904	4
92	89	88	86	89	91	91	90	93	92	89·7	·893	5
87	87	88	86	87	87	87	87	89	89	90·0	·873	6
83	81	83	84	85	88	86	86	85	85	87·2	·954	7
81	83	83	80	82	83	83	82	84	82	**83·0**	·950	8
87	87	84	83	86	86	85	84	84	84	84·3	·934	9
91	87	81	83	83	83	83	83	82	84	84·3	·908	10
85	85	83	87	87	85	86	86	86	84	85·0	·939	11
86	89	88	88	89	90	91	91	87	87	85·8	·945	12
82	80	80	81	84	86	83	83	90	86	84·0	·949	13
87	89	87	86	89	89	91	89	89	90	87·7	·917	14
95	95	95	93	93	93	94	94	**97**	95	**93·0**	·878	15
91	92	91	93	92	90	91	91	92	90	91·7	·911	16
84	84	87	87	88	89	87	87	88	89	87·8	·942	17
80	85	85	85	86	86	86	89	87	89	87·3	·934	18
85	88	87	89	90	89	89	89	89	89	88·3	·911	19
83	83	82	83	85	84	84	86	88	87	86·6	·932	20
86	86	87	87	87	87	90	88	89	90	87·8	·927	21
86	86	87	85	85	83	85	87	91	90	86·4	·930	22
80	81	82	83	85	91	90	89	87	88	86·0	·959	23
80	79	80	85	87	83	85	89	88	87	85·0	·945	24
92	91	93	93	93	93	93	93	92	92	90·5	·922	25
88	87	87	88	88	89	91	92	91	91	90·2	·901	26
81	81	82	84	87	87	85	85	86	84	86·5	·922	27
81	83	80	83	82	83	88	88	86	87	84·4	·939	28
94	93	92	92	93	93	93	91	92	89	90·8	·925	29
88	86	85	86	85	87	89	89	90	91	88·8	·919	30
92	91	93	93	93	91	91	91	93	92	91·0	·891	31
86.3	86·2	85·8	86·4	87·3	87·5	87·8	88·0	88·4	88.2	87·4	·924	Mean.
"	"	"	"	"	"	"	"	"	"	"		*Mean Vapour Pressure in inches of mercury.
·938	·931	·927	·924	·922	·921	·924	·923	·918	·917	·924		

AUGUST.

89	86	88	90	93	91	91	91	91	91	92·5	·930	1
80	80	79	80	81	83	88	84	84	84	85·4	**·944**	2
81	82	78	81	81	82	81	82	81	83	83·4	·930	3
79	80	79	87	87	87	86	86	84	87	82·9	·910	4
80	80	79	86	87	88	86	89	91	92	86·3	·914	5
81	81	81	83	84	83	85	85	88	85	85·7	·929	6
95	95	96	94	95	95	95	96	94	95	93·0	·911	7
95	94	93	94	93	95	93	95	94	94	**94·6**	·914	8
84	81	86	86	87	88	87	89	89	87	87·7	·923	9
88	87	88	89	86	87	87	87	89	87	87·1	·932	10
81	83	89	89	87	87	86	86	87	86	86·6	·938	11
83	81	84	88	86	87	85	85	84	83	84·5	·919	12
81	82	83	85	85	84	85	86	85	88	83·6	·912	13
79	78	82	86	85	87	86	87	90	89	86·1	·909	14
84	82	83	83	84	87	90	90	89	88	87·1	·920	15
83	83	83	83	89	87	88	90	89	90	87·4	·905	16
86	85	83	85	83	87	88	85	89	91	86·7	·883	17
87	87	83	85	86	88	87	83	86	85	86·0	·882	18
82	82	85	87	87	87	87	87	85	87	84·6	·893	19
81	81	83	84	85	87	86	87	87	87	84·3	·890	20
90	89	87	87	86	87	87	87	88	89	87·3	·892	21
83	85	85	85	83	86	87	87	87	90	86·2	·895	22
87	87	88	87	87	88	88	89	87	91	87·2	·903	23
83	82	83	85	87	89	88	88	87	88	87·8	·921	24
74	77	79	79	74	77	82	86	81	79	**81.7**	**.868**	25
80	80	81	82	84	83	84	87	87	84	83·4	.886	26
79	80	83	83	84	86	85	86	85	89	84·7	·880	27
81	85	87	85	85	86	86	87	87	87	86·1	·871	28
79	79	78	81	83	91	89	88	87	86	85·8	·871	29
79	78	86	87	90	88	91	89	91	89	86·5	·870	30
79	75	77	76	78	80	82	82	83	82	82·0	·874	31
83·0	82·8	83·8	85·2	85·6	86·7	86·8	87·3	87·3	87·5	86·3	·904	Mean.
"	"	"	"	"	"	"	"	"	"	"		*Mean Vapour Pressure in inches of mercury.
926	·915	·905	·897	·892	·898	·896	·898	·898	·897	·904		

*Computed from mean temperatures and mean relative humidities.

SEPTEMBER. (THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours.													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
1	84	82	84	84	83	87	85	82	81	79	80	80	78	77
2	87	88	86	86	86	85	86	84	84	83	81	80	80	85
3	87	87	87	87	85	87	84	82	82	83	83	85	85	83
4	87	89	86	84	82	84	85	83	83	84	86	90	87	85
5	84	84	84	84	84	84	85	82	83	81	82	81	83	81
6	84	83	86	84	86	85	84	84	81	80	79	79	78	77
7	85	87	89	89	87	87	85	87	85	83	80	78	76	75
8	85	84	83	84	84	85	84	82	80	79	76	75	74	72
9	81	81	83	84	86	83	85	90	85	81	75	71	71	68
10	82	82	87	88	88	86	86	87	82	79	76	73	68	68
11	80	84	84	87	89	88	86	85	81	80	76	74	72	70
12	81	81	79	78	80	80	82	79	74	72	70	69	68	68
13	78	79	80	80	82	86	84	82	83	75	70	68	67	66
14	80	79	81	79	80	84	86	87	84	82	80	75	69	68
15	82	84	83	86	87	88	87	86	81	79	75	70	69	68
16	79	80	82	83	85	86	87	85	81	76	72	69	68	67
17	80	79	82	81	81	82	83	82	77	80	75	71	71	68
18	77	84	89	90	89	90	90	89	89	87	85	83	80	85
19	94	93	92	92	91	91	91	89	87	85	83	81	80	80
20	87	87	89	87	88	88	89	87	84	84	83	87	87	88
21	91	93	91	92	92	91	92	91	91	92	92	89	89	88
22	88	87	87	87	90	91	91	89	88	87	85	85	84	83
23	85	84	83	83	85	86	84	85	82	84	83	80	77	77
24	83	83	82	83	83	83	83	83	80	77	76	74	74	75
25	82	80	81	82	82	84	85	81	81	78	76	77	75	72
26	80	80	83	83	84	82	80	80	76	75	74	74	73	73
27	81	80	79	80	83	83	85	86	87	86	78	75	75	74
28	83	84	80	82	82	83	83	83	79	76	74	76	73	71
29	81	81	82	83	82	83	82	81	80	77	75	74	73	71
30	82	82	82	82	82	80	81	81	81	81	81	83	81	82
Mean . .	83·3	83·7	84·2	84·5	84·9	85·4	85·3	84·4	82·4	80·8	78·7	77·5	76·2	75·5
*Mean Vapour Pressure in inches of mercury.	·843	·844	·844	·844	·842	·845	·855	·865	·873	·876	·875	·876	·878	·876

OCTOBER.

1	91	88	90	90	91	90	89	90	93	93	90	87	82	82
2	93	94	93	93	91	90	91	89	87	88	86	87	83	84
3	94	94	93	93	95	95	94	95	94	93	91	87	86	85
4	93	94	94	93	92	93	92	93	91	91	89	87	87	87
5	92	92	93	92	92	91	91	90	89	87	85	83	83	83
6	88	90	90	91	92	92	92	91	91	90	88	85	81	85
7	93	93	93	93	93	93	95	94	94	94	93	92	92	91
8	94	94	95	95	95	94	93	92	93	92	91	91	91	91
9	94	94	94	94	94	94	94	94	94	94	93	91	91	92
10	93	92	92	95	94	93	93	93	93	91	91	91	88	87
11	92	88	91	91	88	89	91	93	91	89	87	85	86	86
12	93	94	89	93	92	93	93	94	94	91	90	89	89	92
13	94	94	95	95	95	95	95	95	95	95	92	92	92	92
14	92	94	92	95	93	93	93	93	92	91	91	91	88	89
15	93	93	93	92	93	92	91	92	90	89	87	91	91	91
16	92	91	92	91	93	94	94	93	92	93	95	95	95	95
17	92	92	92	92	92	92	91	91	91	90	87	87	85	85
18	90	89	89	91	92	91	90	89	88	86	83	81	80	78
19	92	92	92	92	93	93	93	92	90	87	84	80	80	78
20	89	89	90	91	91	90	91	91	88	87	74	66	71	70
21	88	90	90	89	89	88	91	88	79	68	65	64	67	67
22	88	83	80	82	84	87	85	79	77	73	70	64	58	60
23	81	80	85	82	79	83	84	81	77	77	69	62	61	61
24	85	85	85	86	87	88	88	84	78	73	67	62	55	50
25	86	88	88	87	86	85	83	82	81	75	70	61	55	57
26	72	72	75	76	75	75	72	73	69	63	57	49	43	45
27	67	64	75	79	79	79	79	74	64	60	61	53	39	63
28	74	73	72	71	76	76	76	64	61	64	57	52	51	48
29	64	67	64	71	70	68	69	65	61	57	53	49	49	52
30	69	66	65	63	65	63	61	63	65	63	61	58	59	67
31	84	83	86	85	85	82	80	80	76	72	69	70	69	71
Mean . . .	87·2	86·8	87·3	87·8	87·9	87·8	87·5	86·4	84·5	82·5	79·5	76·8	75·1	76·3
*Mean Vapour Pressure in inches of mercury.	·837	·823	·830	·835	·830	·827	·824	·832	·847	·851	·850	·846	·851	·871

*Computed from mean temperatures and mean relative humidities.

SEPTEMBER. (THE FIGURES REPRESENT PERCENTAGES.)

Hours. 14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24	Mean.	*Mean Vapour Pressure in inches of mercury.	Date.
											"	
79	83	81	81	83	83	84	84	85	89	82·4	·859	1
85	84	84	83	83	83	83	83	89	87	84·4	·874	2
79	79	79	81	83	85	85	85	85	85	83·9	·874	3
83	82	81	85	88	86	86	85	87	87	85·2	·857	4
80	76	78	81	82	83	82	87	86	85	82·6	·864	5
75	75	77	78	80	81	81	82	83	84	81·1	·865	6
76	75	78	78	78	80	82	82	84	84	82·1	·867	7
70	70	70	70	74	76	77	78	79	79	77·9	·836	8
70	71	71	71	73	74	76	78	78	81	77·8	·829	9
65	64	68	70	74	75	77	78	79	81	77·6	·830	10
67	66	71	72	73	74	74	75	75	79	77·6	·835	11
66	69	69	69	73	74	74	74	77	78	74·3	·795	12
65	65	66	69	71	74	74	75	77	79	74·8	·803	13
68	68	68	70	72	74	76	78	80	82	77·1	·811	14
66	67	68	70	71	72	74	74	77	78	76·7	·807	15
66	64	65	67	71	72	73	75	77	80	75·4	·801	16
69	72	74	75	76	77	76	76	75	76	76·6	·830	17
86	87	89	91	91	93	92	91	93	94	88·1	·868	18
80	80	83	87	87	87	88	89	87	87	86·8	·928	19
85	84	85	87	87	89	88	89	90	90	87·0	·934	20
85	88	90	91	91	88	86	85	85	86	89·5	·927	21
82	86	87	85	84	83	85	86	86	86	86·3	·911	22
76	77	79	79	80	81	81	81	80	82	81·4	·876	23
75	74	75	76	78	78	79	81	80	82	79·0	·862	24
72	71	75	77	78	78	80	80	79	79	78·5	·842	25
73	78	87	82	82	82	83	83	81	81	79·5	·856	26
74	73	75	77	78	78	80	81	81	80	79·5	·853	27
69	70	74	75	79	78	79	80	80	81	78·1	·852	28
74	74	76	78	80	81	81	82	83	81	79·0	·864	29
82	81	80	84	86	87	88	84	89	89	83·0	·868	30
74·7	75·1	76·8	78·0	79·5	80·2	80·8	81·4	82·2	83·1	80·8	·856	Mean.
" ·866	" ·863	" ·857	" ·848	" ·845	" ·844	" ·845	" ·843	" ·843	" ·844	" ·856		*Mean Vapour Pressure in inches of mercury.

OCTOBER.

82	81	80	85	88	89	90	90	90	92	88·0	·851	1
85	91	91	91	91	91	92	93	93	93	90·0	·867	2
83	84	87	90	91	91	93	93	92	91	91·0	·939	3
87	83	83	84	87	88	88	88	90	91	89·4	·929	4
84	84	83	85	87	87	89	89	83	85	87·5	·903	5
85	86	87	85	88	89	88	89	91	92	88·6	·923	6
91	91	91	92	92	93	93	94	94	94	92·8	·915	7
91	90	91	91	92	92	93	94	95	95	92·7	·992	8
93	93	91	91	93	94	93	93	93	93	93·1	·980	9
85	84	86	87	85	87	89	89	91	91	90·0	·920	10
88	89	91	89	91	91	93	92	93	93	89·9	·869	11
93	93	94	93	92	93	93	94	94	95	92·5	·885	12
93	94	93	92	93	93	93	92	94	94	93 6	·914	13
92	92	92	92	93	93	92	92	92	93	92·1	·917	14
92	91	90	91	91	91	91	91	93	93	91·3	·918	15
96	96	96	95	94	93	93	91	93	92	93·5	·895	16
81	85	84	85	86	88	88	87	88	88	88·3	·873	17
77	77	79	82	85	89	90	90	91	91	86·2	·875	18
77	78	79	81	83	84	85	87	88	89	86·2	·901	19
71	72	72	77	81	81	81	82	84	86	81·9	·902	20
64	65	71	76	78	81	80	81	82	82	78·5	·873	21
67	72	73	77	75	75	77	78	77	81	75·9	·841	22
63	64	68	71	75	78	78	79	82	82	75·1	·798	23
60	61	66	71	74	74	78	80	83	85	75·2	·789	24
60	59	62	62	69	69	72	75	68	68	72·8	·727	25
46	47	51	54	60	62	68	67	66	68	62·7	·610	26
35	39	51	64	68	70	65	66	69	73	64·1	·632	27
45	50	62	68	70	75	74	67	65	64	64·8	·646	28
63	67	69	72	74	72	68	69	67	69	64·5	·657	29
70	70	71	75	76	77	77	82	82	84	98·8	·731	30
70	70	75	71	76	79	79	82	82	91	77·4	·844	31
76·4	77·4	79·3	81·3	83·2	84·2	84·6	85·1	85·3	86·1	83·2	·849	Mean.
" ·866	" ·872	" ·873	" ·867	" ·864	" ·866	" ·861	" ·855	" ·835	" ·832	" ·852		*Mean Vapour Pressure in inches of mercury.

* Computed from mean temperatures and mean relative humidities.

RELATIVE HUMIDITY, 1931.

NOVEMBER. (THE FIGURES REPRESENT PERCENTAGES.)

Date.	Hours.													
	0—1	1—2	2—3	3—4	4—5	5—6	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14
1	82	82	82	80	79	80	79	76	72	68	63	59	55	53
2	86	77	75	80	85	88	92	93	93	92	91	91	92	92
3	89	90	90	90	89	90	90	89	90	87	83	83	81	79
4	91	90	90	91	91	91	92	91	89	86	83	77	78	77
5	92	92	93	92	92	92	93	90	89	87	84	81	79	79
6	91	90	85	82	80	80	81	79	74	71	68	65	68	59
7	87	85	85	85	82	81	78	80	73	69	68	66	63	57
8	85	86	86	84	82	79	78	69	65	67	65	60	56	53
9	83	79	78	73	76	77	71	63	61	58	61	57	56	58
10	76	76	77	81	84	79	76	77	77	68	67	66	61	58
11	81	80	79	78	79	77	78	74	73	70	70	68	66	66
12	86	87	87	86	86	87	87	89	85	83	78	75	76	75
13	87	87	87	86	88	88	89	85	82	80	77	75	70	73
14	87	88	88	85	85	84	84	84	81	80	78	74	67	65
15	89	89	90	90	89	89	86	87	83	81	77	68	64	64
16	88	87	88	88	86	88	84	80	72	67	59	59	54	54
17	73	77	85	84	81	84	84	81	71	63	62	61	51	52
18	84	83	81	81	80	79	80	77	74	63	60	57	47	45
19	78	75	79	78	77	76	70	58	55	59	56	52	45	42
20	77	79	81	77	74	72	71	62	65	67	63	53	45	51
21	75	75	78	76	75	72	70	67	70	65	61	56	46	44
22	79	78	78	80	75	71	67	60	67	62	55	54	45	40
23	77	77	78	78	76	79	71	66	59	57	58	58	52	47
24	69	66	73	72	73	76	76	75	70	67	63	56	49	45
25	78	77	75	72	76	80	78	75	75	73	65	64	59	42
26	81	80	82	81	81	77	74	73	69	65	58	54	49	56
27	79	80	83	82	81	81	80	78	75	70	61	55	49	45
28	74	79	77	71	70	69	67	62	62	55	50	49	46	44
29	70	73	71	69	66	58	58	56	54	50	47	50	49	45
30	75	75	75	76	79	75	75	70	67	62	59	55	47	47
Mean . .	81·5	81·3	81·9	80·9	80·5	79·9	78·6	75·5	72·7	69·4	66·3	63·3	58·5	56·9
*Mean Vapour Pressure in inches of mercury.	·772	·765	·761	·744	·731	·718	·709	·699	·710	·714	·725	·725	·705	·704

DECEMBER.

1	80	81	79	79	75	76	77	73	72	61	61	58	52	47
2	78	81	83	83	84	83	81	79	75	61	58	58	50	44
3	69	72	74	75	72	70	69	68	61	60	57	53	48	44
4	71	71	74	72	72	70	67	66	59	55	52	50	48	43
5	64	62	61	61	63	61	55	51	50	48	42	41	39	37
6	66	60	59	57	58	64	65	56	49	47	44	41	41	37
7	65	65	76	79	77	77	80	70	63	58	57	55	45	42
8	76	78	75	73	71	69	67	72	69	65	59	59	48	40
9	74	77	78	77	78	80	77	76	74	70	66	60	52	49
10	82	85	79	76	73	72	76	78	78	73	69	63	54	54
11	84	86	84	80	78	79	82	78	74	68	67	62	50	45
12	75	69	66	68	64	54	54	63	60	59	60	60	76	80
13	84	84	85	88	86	85	85	82	80	80	75	74	76	82
14	87	86	87	87	87	87	88	85	85	83	82	81	80	78
15	83	81	82	83	82	84	83	83	83	79	77	76	73	70
16	87	88	88	88	88	89	89	88	85	83	77	72	74	74
17	87	88	87	83	84	86	87	87	85	82	79	72	66	69
18	89	90	88	87	88	88	89	87	86	83	80	73	70	72
19	81	80	80	79	79	84	85	84	81	79	74	69	64	61
20	84	86	85	83	81	83	82	72	61	60	53	51	52	52
21	73	71	69	65	73	72	76	74	63	54	53	49	51	56
22	80	82	81	79	76	74	72	71	64	65	62	59	53	54
23	77	77	79	79	76	78	79	74	67	64	61	52	45	53
24	81	85	82	82	84	78	72	59	56	55	51	45	43	43
25	75	76	76	72	69	67	66	69	64	54	47	44	41	36
26	58	56	54	52	53	59	60	58	56	52	49	47	41	37
27	60	55	60	66	69	68	63	64	62	58	56	49	42	50
28	76	80	85	76	71	76	83	79	75	71	65	58	53	44
29	59	62	64	75	76	78	76	76	74	73	63	63	58	57
30	78	78	80	81	81	82	82	80	81	78	72	66	62	61
31	72	77	82	85	87	87	87	85	84	80	74	60	60	60
Mean . .	76·0	76·4	76·8	76·5	76·0	76·0	75·9	73·8	70·2	66·4	62·8	58·7	55·1	53·9
*Mean Vapour Pressure in inches of mercury.	·626	·626	·622	·613	·605	·599	·598	·595	·596	·596	·609	·604	·595	·599

*Computed from mean temperatures and mean relative humidities.

NOVEMBER. (THE FIGURES REPRESENT PERCENTAGES.)

Hours.										Mean.	*Mean Vapour Pressure in inches of mercury.	Date.
14—15	15—16	16—17	17—18	18—19	19—20	20—21	21—22	22—23	23—24			
											"	
65	71	77	78	79	81	82	85	88	88	75·2	·828	1
92	91	91	89	90	89	91	91	90	88	88·7	·866	2
77	77	78	82	88	89	88	89	89	89	85·7	·876	3
78	78	82	85	87	87	88	89	91	91	86·4	·892	4
81	82	83	85	87	87	89	91	91	91	88·0	**·935**	5
70	73	77	79	80	81	84	83	85	86	77·5	·826	6
55	57	67	73	80	83	82	83	82	83	75·2	·789	7
55	64	69	76	77	78	77	74	77	80	72·6	·749	8
55	50	49	51	58	66	69	76	80	80	66·0	·670	9
62	61	66	71	75	77	78	81	84	84	73·4	·707	10
67	68	70	77	80	80	79	80	81	83	75·2	·749	11
77	75	76	79	83	83	83	85	85	86	82·5	·860	12
73	76	75	80	81	83	85	85	86	85	81·8	·867	13
70	76	79	81	83	87	88	85	85	87	81·3	·884	14
65	69	74	77	81	84	83	83	80	85	80·3	·884	15
59	61	66	71	73	77	78	79	80	73	73·7	·794	16
52	55	66	68	74	75	74	74	72	75	70·6	·733	17
52	56	58	65	69	72	76	77	68	78	69·1	·699	18
51	50	58	65	67	68	69	70	73	75	64·4	·643	19
54	57	60	65	68	70	72	68	67	66	66·0	·659	20
50	55	58	63	70	74	74	72	76	79	66·7	·662	21
38	45	56	63	67	70	74	74	71	68	63·1	·618	22
41	43	47	66	72	73	75	74	72	70	65·3	·637	23
44	58	62	71	75	75	78	81	78	79	68·0	·675	24
42	51	58	69	73	74	74	69	70	75	68·5	·698	25
60	61	66	71	76	75	70	70	73	78	70·0	·727	26
42	57	66	73	76	74	72	70	75	78	70·1	·742	27
40	40	43	55	68	67	73	75	71	73	61·7	·643	28
44	48	56	65	65	68	70	67	68	72	**60·0**	**·599**	29
54	58	61	66	69	76	74	72	77	76	67·5	·661	30
58·8	62·1	66·5	72·0	75·7	77·4	78·3	78·4	78·8	80·0	73·1	·752	Mean.
"	"	"	"	"	"	"	"	"	"	"		
·725	·748	·764	·788	·799	**·804**	·795	·782	·764	·761	·746		*Mean Vapour Pressure in inches of mercury.

DECEMBER.

45	54	62	71	72	78	81	75	71	74	68·9	·679	1
38	50	64	70	74	76	70	65	65	64	68·1	·667	2
47	56	63	71	76	75	72	71	69	72	65·2	·636	3
44	42	46	61	65	61	60	58	60	62	59·7	·592	4
34	34	41	55	52	57	66	67	68	71	**53·3**	**·505**	5
33	37	47	55	58	61	68	71	72	70	54·9	·505	6
38	41	54	62	67	69	71	68	70	72	63·4	·573	7
45	49	57	64	72	75	75	70	74	71	65·5	·591	8
53	56	63	67	72	75	78	78	77	78	70·2	·621	9
57	62	66	72	75	80	81	78	76	79	72·4	·633	10
48	47	49	47	49	68	73	69	76	75	67·4	·620	11
86	86	86	86	85	84	84	85	88	85	73·5	·686	12
88	90	**91**	90	89	90	90	90	90	89	**85·1**	·625	13
75	77	78	79	78	77	77	78	78	80	81·7	·694	14
70	70	72	76	79	81	82	83	82	85	79·1	·718	15
74	74	78	81	82	82	83	82	84	85	82·3	**·754**	16
69	69	73	76	80	82	81	79	83	87	80·0	·728	17
73	72	75	80	82	81	78	76	79	81	81·1	·734	18
57	55	64	71	77	81	81	79	80	82	75·3	·704	19
40	49	66	71	76	78	80	76	70	74	69·4	·671	20
60	64	67	72	72	74	78	76	77	76	67·3	·633	21
59	65	71	75	77	78	81	78	73	78	71·0	·706	22
56	62	64	69	75	77	79	81	78	78	70·0	·676	23
50	55	59	63	67	70	74	72	71	74	65·5	·617	24
34	34	54	59	65	67	71	62	53	62	59·0	·541	25
45	57	62	67	65	57	55	54	56	61	54·6	·517	26
58	61	68	72	73	74	75	75	71	70	63·3	·580	27
53	58	62	68	74	73	64	63	63	64	68·1	·592	28
57	59	63	67	71	75	73	69	69	76	68·3	·580	29
61	61	66	69	71	74	77	78	82	80	74·2	·626	30
61	64	66	68	71	73	78	81	84	84	75·4	·627	31
55·2	58·4	64·4	69·5	72·3	74·4	75·4	73·8	73·8	75·5	69·5	·630	Mean.
"	"	"	"	"	"	"	"	"	"	"		
·612	·639	·667	·683	·685	**·691**	·682	·650	·629	·630	·627		*Mean Vapour Pressure in inches of mercury.

* Computed from mean temperatures and mean relative humidities.

Notation :—H=High clouds (Ci, Ci-S.) ; M=Medium clouds

JANUARY.

Date.	Cloud Forms (coming from)									Cloud Amounts (All Forms).					
	8½h.			12½h.			16½h.								
	H.	M.	L.	H.	M.	L.	H.	M.	L.	6h.	8h.	10h.	12½h.	16½h.	22h.
1	..	..	..	W	..	..	SW	..	..	1	0	0	1	2	1
2	..	SE	..	..	..	E	..	..	N	1	1	0	2	1	0
3	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
4	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
5	W	..	..	W	..	..	SW	..	..	4	2	1	1	4	0
6	..	..	..	SW	..	..	W	..	..	1	0	0	2	8	4
7	SW	..	SE	SW	..	SE	SW	S	..	7	9	9	8	6	0
8	SW	SW	..	SW	W	..	W	..	..	3	7	7	6	3	2
9	SW	..	..	SW	..	..	SW	..	..	2	0	0	1	2	0
10	SW	..	..	SW	..	..	SW	..	..	1	0	1	1	0	0
11	..	..	..	SW	..	..	SW	..	..	1	0	1	1	1	0
12	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
13	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
14	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
15	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
16	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
17	SSW	..	..	SW	..	..	SW	..	..	1	3	5	4	1	0
18	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
19	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
20	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
21	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
22	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
23	W	..	..	SW	..	..	SW	..	..	4	2	2	2	1	0
24	..	..	..	SW	..	..	W	..	..	0	0	0	1	7	0
25	SW	..	NE	W	..	..	W	..	..	1	3	2	2	2	2
26	NE	..	..	NW	..	..	W	..	..	1	1	1	4	3	0
27	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
28	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
29	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
30	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
31	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
Mean cloud amount.										0·9	0·9	0·9	1·2	1·3	0·3

MARCH.

1	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
2	..	..	..	..	..	..	SW	..	..	0	0	0	0	1	0
3	..	..	..	..	..	..	SW	..	..	1	1	2	0	0	0
4	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
5	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
6	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
7	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
8	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
9	..	..	..	..	..	..	NW	..	..	3	0	1	0	2	0
10	W	W	N	W	W	..	W	W	..	6	8	8	9	7	0
11	NW	..	..	..	..	..	W	..	..	2	1	0	0	1	0
12	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
13	NW	..	..	..	..	..	W	..	..	2	1	1	0	1	0
14	NW	..	..	WNW	..	..	W	..	..	1	2	2	2	2	0
15	SW	..	..	SW	SW	..	SW	SW	..	1	2	2	5	9	0
16	W	..	..	W	..	..	SW	..	..	2	1	1	3	6	0
17	WSW	SW	N	SW	S	..	..	SW	..	8	7	5	6	10	6
18	SW	SW	..	W	S	..	..	S	..	7	5	4	6	8	10
19	..	..	SW	..	SW	S	..	SW	W	8	9	5	7	6	0
20	..	..	SW	..	..	..	..	..	E	5	1	2	0	1	0
21	..	..	S	..	..	..	..	..	..	1	1	0	0	0	0
22	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
23	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
24	..	..	..	..	..	..	..	..	SE	1	0	0	0	1	6
25	..	..	SW	..	..	NW	..	..	SE	5	6	3	5	8	3
26	..	..	N	..	..	S	..	SE	SE	7	8	4	5	6	4
27	..	..	S	..	..	S	..	..	SE	9	10	8	7	6	3
28	..	..	SW	..	..	SW	..	..	..	6	5	4	3	0	6
29	..	..	S	..	..	S	..	..	..	5	6	5	4	0	0
30	..	..	S	..	..	WSW	..	..	..	4	2	3	1	0	0
31	..	..	SW	..	..	SSW	..	..	..	5	1	1	1	0	5
Mean cloud amount.										2·9	2·5	2·0	2·1	2·4	1·4

(Ci-Cu, A-Cu, A. S.) ; L=Low clouds (Cu, Cu-N, S, N.)=No cloud.

FEBRUARY.

Cloud Forms (coming from)									Cloud Amount (All Forms).						Date.
8½h.			12½h.			16½h.									
H.	M.	L.	H.	M.	L.	H.	M.	L.	6h.	8h.	10h.	12½h.	16½h.	22h.	
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	1
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	2
..	..	..	W	..	..	W	..	..	0	0	0	1	2	0	3
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	4
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	5
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	6
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	7
..	..	W	..	..	..	..	..	..	1	4	7	0	0	0	8
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	9
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	10
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	11
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	12
..	..	..	WSW	..	..	W	..	..	0	0	0	2	3	0	13
N	..	..	..	..	..	..	..	..	0	1	0	0	0	0	14
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	15
..	..	..	W	..	..	..	..	..	0	0	0	1	0	0	16
..	..	..	..	..	..	..	..	..	0	0	1	0	0	0	17
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	18
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	19
..	..	..	..	..	..	W	..	..	1	0	0	0	1	0	20
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	21
..	..	..	..	..	..	SW	..	..	0	0	0	0	2	0	22
..	..	..	W	..	..	..	..	..	0	0	0	1	0	0	23
N	..	..	..	..	..	..	..	..	1	1	0	0	0	0	24
..	..	NW	W	..	..	NW	..	..	1	7	0	2	7	0	25
..	..	..	..	..	..	..	..	..	2	0	0	0	0	0	26
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	27
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	28
									0·2	0·5	0·3	0·3	0·5	0·0	Mean cloud amount.

APRIL.

..	..	SW	..	..	SSW	..	..	SW	5	7	8	5	4	1	1
..	W	SW	..	..	WSW	..	..	E	8	4	6	6	1	0	2
..	..	..	..	..	..	..	..	..	1	0	0	0	0	0	3
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	4
..	..	..	..	SW	..	..	..	..	0	0	0	1	0	0	5
..	..	S	..	..	..	..	..	SW	0	1	1	0	2	1	6
..	..	W	..	..	SW	..	..	W	4	3	3	3	6	0	7
W	..	SW	W	..	..	SW	..	..	2	4	5	2	1	0	8
.	..	NW	..	..	..	..	..	..	3	1	0	0	0	0	9
..	..	..	W	..	..	..	..	..	0	0	0	1	0	0	10
..	..	..	..	..	..	NW	..	..	3	0	0	0	2	0	11
..	..	..	..	..	..	..	..	..	0	0	0	0	0	2	12
..	..	SW	..	..	..	..	..	NE	2	1	2	0	1	0	13
N	..	..	SW	..	..	SW	..	..	0	1	2	1	2	2	14
..	..	E	..	..	..	..	..	..	2	3	0	0	0	0	15
..	..	..	..	..	..	..	..	..	0	0	0	0	0	1	16
..	..	N	SW	..	..	SE	..	..	5	4	2	3	2	1	17
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	18
..	..	..	..	..	..	..	..	..	1	0	0	0	0	0	19
..	..	SE	..	..	S	SW	..	SE	4	1	2	2	2	0	20
..	..	..	..	..	..	..	..	..	2	0	0	0	0	0	21
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	22
..	..	..	..	..	..	..	..	..	1	0	0	0	0	0	23
..	..	..	..	..	..	..	..	..	0	0	1	0	0	0	24
..	..	SW	..	NW	SW	W	..	..	5	6	6	2	1	9	25
..	..	SW	..	..	S	SE	..	..	2	3	8	4	1	0	26
SW	.	..	..	SW	..	..	SW	..	4	3	3	4	5	2	27
..	S	..	.	SW	..	..	..	..	0	3	1	1	0	0	28
WSW	..	..	S	..	..	..	..	..	3	2	1	0	0	0	29
..	..	SW	..	..	..	..	..	SE	1	0	0	0	0	0	30
									1·9	1·6	1·7	1·2	1·0	0·6	Mean cloud amount.

Notation :—H=High clouds (Ci, Ci-S.); M=Medium clouds

MAY.

Date.	Cloud Forms (coming from)									Cloud Amounts (All Forms).					
	8½h.			12½h.			16½h.			6h.	8h.	10h.	12½h.	16½h.	22h.
	H.	M.	L.	H.	M.	L.	H.	M.	L.						
1	..	SW	S	W	..	..	NW	..	S	5	4	1	1	3	6
2	..	..	..	..	..	..	..	..	..	7	5	2	0	0	5
3	..	..	E	..	..	S	..	..	SW	1	0	0	1	3	5
4	..	..	S	..	..	..	..	..	..	1	0	0	0	0	6
5	..	..	NW	..	..	..	..	..	..	5	3	0	0	0	1
6	..	..	N	..	..	..	..	..	..	1	2	2	0	0	1
7	..	..	NW	..	..	..	..	..	..	2	4	1	0	0	1
8	..	..	W	..	..	SW	..	..	W	2	3	2	3	5	1
9	..	..	SW	..	..	NW	..	..	W	3	2	2	3	6	1
10	..	..	W	..	..	NW	..	..	W	2	1	3	3	4	2
11	..	..	W	SSE	..	NW	..	..	SW	2	3	2	2	3	2
12	..	..	SW	SE	..	NW	SE	..	NW	3	4	1	1	2	1
13	..	..	NW	..	..	W	..	..	SW	2	3	2	4	1	1
14	..	..	W	..	..	NW	..	..	SW	2	4	1	4	3	1
15	..	..	NW	..	..	NW	..	..	W	2	1	1	2	3	1
16	..	..	NNW	..	..	NW	..	..	..	2	3	1	1	0	0
17	..	..	W	..	..	NNW	..	..	..	2	3	1	1	0	1
18	..	..	NW	..	..	W	..	..	..	4	2	1	2	0	1
19	..	..	W	..	..	W	..	..	W	5	3	3	3	2	1
20	..	..	W	..	..	NNW	..	..	W	2	3	2	1	2	1
21	..	..	NW	..	..	WNW	..	..	W	2	3	2	2	6	1
22	..	..	N	..	..	..	..	..	NW	2	3	2	0	2	3
23	..	..	N	..	..	..	..	..	..	3	4	0	0	0	3
24	..	..	SW	..	..	..	..	..	W	1	4	1	0	2	4
25	..	..	S	..	..	NW	..	..	..	4	5	1	0	0	4
26	..	..	SW	..	..	W	..	..	W	2	3	1	3	4	2
27	..	..	NW	..	..	NW	..	..	..	2	3	2	0	0	5
28	..	..	N	..	..	NNW	..	..	..	5	4	2	0	0	4
29	..	..	NW	..	..	NW	..	..	..	5	4	2	0	0	1
30	..	..	W	..	..	N	..	..	..	2	3	3	1	0	2
31	..	..	N	..	..	SE	..	..	SW	3	6	2	1	2	4
Mean cloud amount.										2·8	3·1	1·5	1·3	1·7	2·3

JULY.

1	..	..	SW	..	..	SW	..	..	W	10	10	10	10	10	8
2	..	..	SW	..	..	W	..	..	SW	10	10	10	10	10	10
3	..	..	SW	..	..	W	..	.	SW	10	10	10	10	8	10
4	..	..	W	..	..	SW	..	..	W	10	10	10	10	10	10
5	..	..	NW	..	..	SW	..	..	W	10	8	10	10	10	10
6	..	..	SW	..	..	S	..	..	SW	10	10	10	8	10	5
7	..	..	W	..	..	W	..	..	SW	10	10	8	8	10	5
8	..	WSW	W	..	..	W	..	..	W	4	7	6	10	8	8
9	..	..	S	..	..	W	..	..	SW	4	5	10	10	9	7
10	..	..	SW	..	..	SW	..	..	SW	10	10	10	10	10	10
11	..	..	SW	..	..	W	..	..	SW	8	10	10	10	10	10
12	..	..	W	..	..	W	..	..	W	10	10	10	10	10	9
13	..	..	W	..	..	W	..	..	W	10	10	9	10	7	10
14	..	..	W	..	..	SW	..	..	W	10	10	10	10	10	10
15	..	..	W	..	..	S	..	..	W	10	10	10	10	10	10
16	..	..	W	..	..	W	..	..	W	10	10	10	10	10	10
17	..	..	W	..	..	W	..	..	SW	10	10	10	10	10	7
18	..	..	SW	..	..	SW	..	..	SW	10	10	8	10	10	7
19	..	..	W	..	..	SW	..	..	W	10	9	8	10	10	10
20	..	.	W	..	..	W	..	..	W	10	10	7	8	7	10
21	..	..	W	..	..	WSW	..	..	SW	10	10	10	10	10	5
22	..	..	SW	..	..	SW	..	..	W	8	9	10	10	10	10
23	..	..	W	..	..	W	..	..	SSW	10	8	7	10	10	10
24	..	..	W	..	..	WNW	..	..	W	7	10	10	9	10	10
25	..	..	W	..	..	W	..	..	W	10	10	10	10	10	10
26	..	..	S	..	..	S	..	..	S	10	10	10	9	7	10
27	..	..	SW	..	..	SSW	..	SW	S	4	6	8	5	4	4
28	..	..	SW	..	..	W	..	..	SW	6	7	8	10	7	10
29	..	..	W	..	..	W	..	..	W	10	10	10	10	10	10
30	..	..	W	..	..	W	..	..	W	10	10	10	10	10	10
31	..	..	W	..	..	W	..	..	W	10	10	10	10	10	10
Mean cloud amount.										9·1	9·3	9·3	9·6	9·3	8·9

(Ci-Cu, A-Cu, A. S.); L=Low clouds (Cu, Cu-N, S, N.)=No cloud.

JUNE.

Cloud Forms (Coming from)									Cloud Amounts (All Forms).						Date.
8½h.			12½h.			16½h.			6h.	8h.	10h.	12½h.	16½h.	22h.	
H.	M.	L.	H.	M.	L.	H.	M.	L.							
W	..	NE	..	N	..	..	..	SE	4	3	1	1	8	7	1
..	..	W	WSW	SE	N	..	SW	NE	5	4	3	4	3	5	2
..	NW	N	..	NNW	W	..	..	W	7	4	3	3	2	4	3
S	..	W	SSW	..	NW	..	..	NW	4	5	3	2	3	8	4
SE	..	NW	SSE	..	NW	W	..	NW	5	6	5	3	4	2	5
SW	..	NW	..	..	WNW	..	..	WNW	5	4	3	2	3	3	6
..	..	W	..	..	NW	..	..	W	1	2	3	3	4	2	7
..	..	W	..	..	WNW	..	..	WNW	3	2	2	3	3	2	8
..	..	S	..	..	WSW	..	..	W	5	3	3	3	2	1	9
..	..	S	..	..	SE	S	..	S	2	7	2	2	3	1	10
..	..	..	..	..	SE	..	..	S	2	0	1	1	2	2	11
..	..	S	..	..	S	..	..	S	7	2	10	4	3	10	12
..	..	S	..	..	S	..	..	S	10	8	9	10	10	10	13
..	..	S	..	..	S	..	..	S	10	10	10	10	10	10	14
..	..	S	..	..	S	..	..	SW	9	8	8	9	5	6	15
..	..	SW	..	..	SW	..	..	SW	4	6	4	5	6	1	16
..	..	SW	..	..	SW	..	..	W	2	6	2	3	8	0	17
..	..	SW	..	..	SW	..	..	W	4	5	2	3	6	2	18
..	..	SW	..	..	SW	..	..	SW	10	10	8	10	10	6	19
..	..	W	..	..	W	..	..	SW	10	10	10	10	10	8	20
..	..	W	..	..	SW	..	..	NW	10	10	10	10	10	10	21
..	W	NW	WSW	..	NW	W	E	W	7	6	5	5	6	4	22
..	N	W	..	..	W	..	SW	NW	3	8	8	10	6	3	23
N	..	S	..	..	SW	..	NE	SW	5	4	3	5	6	6	24
..	..	SW	..	..	SW	..	..	WSW	10	8	7	6	5	7	25
..	..	SW	..	..	WNW	..	..	W	4	7	7	5	8	10	26
..	SW	W	..	..	W	..	..	W	10	7	10	10	10	10	27
..	..	SW	..	..	NW	..	..	N	10	10	10	10	10	10	28
..	..	S	..	..	W	..	..	SW	10	10	10	10	8	10	29
..	..	SW	..	..	SW	..	..	W	10	9	10	10	10	10	30
									6·3	6·1	5·7	5·7	6·1	5·7	Mean cloud amount.

AUGUST.

..	..	SW	..	..	SW	..	..	W	10	10	10	10	10	10	1
..	SW	W	..	..	W	..	..	W	10	4	10	3	6	5	2
..	..	SW	..	..	W	..	..	W	10	10	8	10	10	4	3
..	..	SW	..	NW	SW	..	W	SW	5	4	6	7	6	5	4
..	..	W	..	..	W	..	..	W	10	10	8	6	8	6	5
..	..	SW	..	..	SW	..	..	W	4	10	10	10	8	6	6
..	..	W	..	..	W	..	..	W	10	10	10	10	10	10	7
..	..	W	..	..	W	..	..	W	10	10	10	10	10	10	8
..	..	W	..	..	W	..	..	W	10	10	10	10	10	6	9
..	..	W	..	..	W	..	..	SW	10	8	10	10	10	9	10
..	..	W	..	..	W	..	..	W	7	8	7	10	10	9	11
..	..	W	..	..	W	..	..	W	8	10	8	10	10	10	12
..	..	SW	..	..	W	..	..	W	10	8	10	10	10	10	13
..	..	W	..	..	W	..	..	W	10	10	10	9	10	10	14
..	..	W	..	..	W	..	..	SW	8	9	10	7	8	10	15
..	..	W	..	..	W	..	..	SW	10	10	10	10	10	10	16
..	..	W	..	..	W	..	..	W	10	10	10	10	10	10	17
..	..	W	..	..	W	..	..	SW	10	10	10	10	10	10	18
..	..	W	..	..	W	..	..	W	8	10	10	10	10	10	19
..	..	W	..	..	W	..	..	W	10	10	10	10	10	10	20
..	..	W	..	..	W	..	..	W	10	10	10	10	10	10	21
..	..	W	..	..	W	..	..	W	10	10	10	10	10	10	22
..	..	W	..	..	W	..	..	W	10	10	10	10	10	10	23
..	..	W	..	SW	W	..	..	W	10	10	10	7	6	8	24
..	..	W	..	..	W	..	..	W	9	7	10	8	10	8	25
..	..	W	..	..	W	..	..	W	10	8	8	10	9	10	26
..	SW	W	..	..	W	..	..	W	10	7	8	10	10	10	27
..	..	W	..	..	W	..	..	W	9	10	4	10	10	10	28
..	..	W	..	..	W	..	..	W	10	10	7	8	6	10	29
..	..	W	..	..	W	..	..	W	7	10	10	8	10	10	30
..	..	W	..	..	W	..	..	W	8	10	7	10	9	10	31
									9·1	9·1	9·1	9·1	9·2	8·9	Mean cloud amount.

Notation :—H=High clouds (Ci, Ci-S, Ci.-Cu.); M=Medium clouds

SEPTEMBER.

Date.	Cloud Forms (coming from)									Cloud Amounts (All Forms).					
	8½h.			12½h.			16½h.			6h.	8h.	10h.	12½h.	16½h.	22h.
	H.	M.	L.	H.	M.	L.	H.	M.	L.						
1	..	..	W	..	..	W	..	..	W	7	10	10	8	10	10
2	..	..	W	..	..	W	..	..	W	10	10	10	10	10	10
3	..	..	W	..	..	W	..	..	W	7	10	10	10	6	4
4	..	..	W	..	..	W	..	..	W	10	10	10	10	10	10
5	..	..	W	..	..	W	..	..	W	10	7	8	10	10	8
6	..	..	W	..	..	W	..	..	W	4	8	4	9	7	5
7	..	..	W	..	..	WNW	..	..	W	8	10	10	8	7	6
8	..	..	W	..	NW	WNW	SW	..	W	4	3	3	5	6	5
9	..	..	W	..	..	W	NW	..	W	6	7	6	5	6	2
10	..	..	SW	ESE	..	WNW	..	..	W	7	5	8	4	2	7
11	..	..	S	..	..	W	..	..	W	6	5	5	4	8	7
12	..	..	N	..	..	N	..	..	W	3	2	4	1	4	2
13	..	..	W	..	WNW	N	..	..	W	4	7	5	4	5	2
14	..	NE	SW	..	..	N	..	..	NW	5	6	7	2	3	2
15	..	..	NW	..	..	NW	..	..	NW	4	6	9	7	8	3
16	..	SE	S	..	NW	WNW	..	..	NW	4	8	6	5	3	2
17	..	..	N	..	..	N	..	..	N	8	9	7	5	9	8
18	..	..	N	..	..	N	..	..	NW	10	10	10	10	10	10
19	..	SW	S	..	SW	W	..	..	S	6	7	3	8	10	10
20	..	..	S	..	..	S	..	..	S	8	10	10	10	7	9
21	..	..	SW	..	..	W	..	..	W	10	10	10	10	10	10
22	..	..	W	..	..	W	..	..	W	10	10	10	10	10	4
23	..	..	W	..	..	NW	..	..	NW	10	8	9	4	6	9
24	..	..	W	..	..	W	..	..	W	5	7	6	6	3	7
25	..	..	NW	..	..	W	..	..	W	8	10	6	9	10	9
26	NW	..	NW	..	NW	W	..	..	W	10	7	8	6	10	9
27	..	..	W	W	..	W	..	..	W	8	10	8	5	6	9
28	..	..	SW	..	..	W	..	..	W	8	6	4	8	5	4
29	..	..	W	..	..	W	SW	..	W	5	6	5	7	8	4
30	..	..	W	..	..	W	..	..	NW	10	10	10	10	10	10
mean cloud amount.										7·2	7·8	7·4	7·0	7·3	6·6

NOVEMBER.

1	SE	..	..	SE	..	E	W	..	E	4	2	4	5	7	3
2	..	..	S	..	..	SE	..	..	S	10	10	10	10	10	6
3	..	N	E	N	W	E	W	..	NE	7	5	4	4	5	3
4	E	..	NE	SE	..	E	SW	..	E	5	4	4	4	5	2
5	SE	..	E	..	..	E	SSE	..	E	5	3	3	3	4	1
6	..	..	..	..	..	..	..	..	E	1	0	1	0	2	0
7	SW	..	NE	SE	SW	E	SW	..	E	3	7	6	6	3	0
8	..	SE	..	S	..	..	..	E	NE	1	1	0	1	2	8
9	..	..	..	S	..	..	..	..	..	1	0	0	1	0	0
10	SE	..	..	SE	..	..	..	..	..	2	1	0	1	0	0
11	W	S	E	NW	S	E	W	S	NE	6	5	6	5	6	7
12	..	SE	N	..	..	SW	SW	..	NE	10	8	9	7	8	3
13	SE	..	E	SW	W	E	SW	..	NE	8	5	4	5	4	2
14	SE	..	E	..	SW	N	..	..	E	6	7	10	7	9	3
15	S	..	..	..	..	NE	..	..	E	3	1	3	3	2	2
16	..	..	..	..	..	..	..	..	NE	0	0	0	0	1	0
17	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
18	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
19	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
20	SE	..	..	..	..	..	..	..	..	4	1	1	0	0	0
21	E	..	..	E	..	..	..	..	..	2	3	2	1	0	1
22	S	..	..	SSE	..	..	SW	..	..	4	3	2	4	3	0
23	..	..	..	..	..	..	..	..	..	1	0	0	0	0	0
24	..	..	..	..	..	..	..	..	..	1	0	0	0	0	8
25	..	SW	S	SW	..	..	..	..	..	4	4	3	3	0	0
26	NW	..	..	..	..	..	..	..	..	1	1	1	0	0	0
27	S	..	..	S	..	..	SW	..	..	2	1	2	2	1	0
28	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
29	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
30	..	..	..	..	..	..	..	..	..	0	0	0	0	0	0
Mean cloud amount.										3·1	2·4	2·5	2·4	2·4	1·6

(A-Cu, A-S); L=Low clouds (Cu, Cu-N, S, N); .. =No cloud.

OCTOBER.

Cloud Forms (coming from)									Cloud Amount (All Forms).						Date.
8½h.			12½h.			16½h.									
H.	M.	L.	H.	M.	L.	H.	M.	L.	6h.	8h.	10h.	12½h.	16½h.	22h.	
..	..	W	..	..	W	..	..	NW	10	10	10	10	10	10	1
..	..	W	..	..	W	..	..	NW	10	10	10	10	10	10	2
..	..	S	..	..	W	..	..	W	10	10	10	10	10	10	3
..	W	SSE	..	..	W	..	..	W	10	8	7	6	8	10	4
S	..	N	SW	..	N	..	..	W	10	7	8	7	8	10	5
..	..	W	..	SSE	NW	..	..	N	10	10	8	7	8	10	6
..	..	W	..	..	SW	W	..	SW	10	10	10	9	7	6	7
..	..	W	..	..	W	..	..	W	10	10	10	10	10	5	8
..	..	W	..	..	W	..	..	W	7	9	10	10	10	4	9
..	..	S	..	..	S	..	..	SW	8	10	8	10	8	10	10
..	..	SW	..	..	SW	..	..	S	10	10	10	10	10	10	11
..	..	S	..	..	S	..	..	SW	10	10	10	10	10	10	12
..	..	S	..	..	S	..	..	SW	10	10	9	10	10	10	13
..	..	SW	..	..	SW	..	..	SW	10	8	7	10	10	6	14
..	..	W	..	..	W	..	..	SW	8	10	6	10	8	6	15
..	..	W	..	..	W	..	..	W	10	10	10	10	10	8	16
..	..	S	..	SE	SW	..	..	S	9	10	10	7	6	6	17
..	..	W	..	..	W	..	..	W	7	2	2	2	3	3	18
..	..	E	..	..	NW	..	..	E	3	6	5	1	2	4	19
..	..	E	..	..	NW	..	..	E	3	1	2	2	1	3	20
..	..	..	..	..	..	SW	..	..	2	1	0	0	2	3	21
..	..	SE	NE	..	..	W	..	..	2	2	1	1	2	2	22
SE	..	..	..	..	N	W	..	..	2	3	2	1	2	4	23
SE	..	..	SE	..	..	..	..	NE	2	2	2	1	2	0	24
..	..	..	..	..	E	..	..	..	1	0	0	2	0	0	25
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	26
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	27
..	..	..	..	..	NE	..	..	..	0	0	0	1	0	0	28
..	..	..	..	..	E	..	..	..	1	0	0	1	0	0	29
SE	NW	..	..	..	E	..	..	E	5	3	2	2	1	3	30
..	NE	E	..	..	NE	..	..	E	4	3	2	2	1	2	31
									6·3	6·0	5·5	5·6	5·5	5·3	Mean cloud amount.

DECEMBER.

..	..	..	SE	..	..	..	..	..	1	0	1	1	0	0	1
..	..	..	..	..	..	SW	..	..	0	0	1	0	2	0	2
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	3
..	..	..	SE	..	..	SW	..	..	0	0	0	1	2	0	4
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	5
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	6
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	7
E	..	..	E	..	..	S	..	..	2	1	1	1	2	0	8
SW	..	..	SE	..	..	WSW	..	..	6	7	5	6	7	0	9
SE	..	..	S	..	..	SW	..	..	4	7	5	8	9	2	10
SE	S	..	..	SSW	S	..	SW	S	6	7	10	8	9	6	11
..	..	SE	..	..	S	..	..	E	10	8	10	10	10	10	12
..	..	E	..	..	E	..	..	E	10	10	10	10	10	10	13
..	..	E	..	..	SE	..	S	E	8	10	10	10	8	9	14
..	..	SE	..	..	E	..	..	E	10	7	2	4	3	5	15
..	..	SE	..	..	E	..	..	E	4	5	2	3	2	0	16
..	..	..	..	..	E	..	..	E	0	0	0	2	1	0	17
..	..	..	..	..	E	..	..	E	0	0	0	2	1	3	18
..	..	SE	..	..	E	..	..	E	4	2	3	1	1	2	19
..	SW	..	..	..	..	..	..	..	3	4	2	2	0	0	20
..	..	SW	..	W	E	SW	S	..	5	4	3	2	3	0	21
..	SW	..	..	W	N	..	..	NE	2	4	1	2	1	2	22
SE	..	..	SE	..	..	S	..	E	1	2	3	1	3	1	23
SE	..	..	..	..	..	..	..	..	1	1	1	0	0	0	24
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	25
SE	..	..	E	..	..	E	..	..	3	4	2	1	2	2	26
..	..	..	SE	..	..	..	..	..	2	1	2	2	0	0	27
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	28
..	..	..	..	..	..	..	..	..	1	0	0	0	0	0	29
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	30
..	..	..	..	..	..	..	..	..	0	0	0	0	0	0	31
									2·7	2·7	2·4	2·4	2·5	1·7	Mean cloud amount.

DURATION OF BRIGHT SUNSHINE,* 1931.

Month.	Hours.													Bright Sunshine.	
	6—7	7—8	8—9	9—10	10—11	11—12	12—13	13—14	14—15	15—16	16—17	17—18	18—19	Average per day.	Greatest number of hours in a day.
	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hrs.	hrs.
January	0·05	0·89	0·98	0·96	1·00	1·00	1·00	1·00	1·00	1·00	0·97	0·31	..	10·1	10·6
February	·05	·93	·99	·99	1·00	1·00	1·00	1·00	1·00	1·00	1·00	·49	..	10·4	10·9
March	·01	·73	·94	·97	1·00	0·97	0·98	0·96	0·93	0·9	0·86	·34	..	9·6	10·7
April	·27	·94	·97	·97	0·98	·94	·98	1·00	1·00	1·00	·96	·47	..	10·5	11·3
May	·52	·91	·98	·99	·99	1·00	1·00	1·00	1·00	1·00	1·00	·71	..	**11·1**	11·7
June	·21	·56	·65	·68	·68	0·65	0·68	0·69	0·72	0·67	0·62	·33	·01	7·1	**11·9**
July	·05	·06	·17	·23	·24	·15	·15	·18	·18	·19	·17	·04	..	1·8	7·7
August	..	·09	·19	·21	·18	·31	·32	·31	·36	·28	·12	·02	..	2·4	9·0
September	·03	·40	·51	·51	·54	·57	·59	·62	·60	46	·30	·02	..	5·1	9·4
October	·19	·40	·50	·55	·57	·59	·60	·60	·61	·51	·50	·11	..	5·7	10·9
November	·31	·86	·91	·93	·91	·94	·97	·94	·94	·92	·87	·09	..	9·6	10·7
December	·24	·82	·87	·87	·88	·88	·87	·88	·86	·85	·82	·11	..	8·9	10·6
Mean	**0·16**	0·63	0·72	0·74	0·75	0·75	0·76	**0·77**	0·77	0·73	0·68	0·25	..	7·7	..

* From Campbell-Stokes Sunshine Recorder.

MAGNETIC TABLES.

(ALIBAG OBSERVATORY.)

Diurnal variation of magnetic elements.

The following tables give the diurnal variation of declination (D), horizontal component of the force (H), the easterly component (Y), the vertical component (Z), the inclination (I) and the total force (F) for each month based on the hourly tabulations for the 5 international quiet days. Owing to very small value of D the variation tables of H and the northerly component of the force (X) are practically the same. No separate table for $\triangle$ X has consequently been given. The days are reckoned from 4 h. 51 m. to 3 h. 51 m. of the local mean time corresponding to the Greenwich civil day 0 h. to 23 h.

The variations in X, Y, I and F were computed from the variations in D, H and Z by means of the formulæ:

$$\triangle X = 1{\cdot}000\ \triangle H + 0{\cdot}034\ \triangle D.$$
$$\triangle Y = -0{\cdot}003\ \triangle H + 10{\cdot}859\ \triangle D.$$
$$\triangle I = 0{\cdot}075\ \triangle Z - 0{\cdot}036\ \triangle H.$$
$$\triangle F = 0{\cdot}903\ \triangle H + 0{\cdot}431\ \triangle Z.$$

A *plus* sign indicates an hourly value greater than the mean for the day.

Mean results are also given for groups of four months, as indicated by the Roman numerals at the head of the columns:—I January, February, November, December; II March, April, September, October; III May, June, July, August.

All diurnal inequalities have been corrected for the aperiodic change by the formula $\frac{N(12-n)}{24}$ where 'N' denotes the excess at the second midnight of the representative day as compared to the first midnight, and 'n' denotes any hour of the day reckoned from 0 (first midnight) to 24. The actual non-cyclic corrections applied, namely, $(a_{24} - a_0)$ in the different months of the year have been given under the respective columns of the tables for $\triangle$D, $\triangle$H and $\triangle$Z.

The "allowance for the use of the Means", which is given by $u_p = m_p + \frac{1}{2}\left(m_p - \frac{m_{p+1} + m_{p-1}}{2}\right)$, where u_p is the true ordinate and m_{p-1}, m_p, m_{p+1} the successive mean ordinates, is very small and less than 1γ in the case of H and V and 0·1 minute of arc in the case of D. Although small, the corrections have been used in determining the last significant figure in the following variation tables.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

Hour.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Group means.			Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
0	−0·4	−0·3	−0·3	0·0	+0·4	+0·7	+0·7	+0·5	+0·3	−0·1	−0·4	−0·2	−0·3	0·0	+0·6	+0·1
1	−0·5	−0·3	−0·2	+0·5	+1·1	+1·4	+1·4	+1·3	+0·6	+0·1	−0·4	−0·5	−0·4	+0·3	+1·3	+0·4
2	−0·5	−0·3	+0·4	+1·5	+2·0	**+2·0**	+2·2	**+2·2**	+1·3	+0·7	−0·7	−0·8	**−0·5**	+1·0	+2·1	+0·8
3	−0·1	+0·3	+1·3	**+2·3**	**+2·3**	+1·9	**+2·4**	+2·2	**+1·5**	**+1·0**	−0·4	**−0·9**	−0·3	**+1·5**	**+2·2**	**+1·1**
4	**+0·4**	**+0·9**	**+1·5**	+2·0	+1·6	+1·3	+1·3	+1·1	+0·8	+0·5	−0·3	−0·5	+0·1	+1·3	+1·3	+0·9
5	+0·3	+0·6	+1·3	+1·2	−0·1	**+0·3**	−0·2	−0·5	−0·3	−0·4	−0·5	−0·3	0·0	+0·4	−0·1	+0·1
6	−0·5	**−0·0**	+0·2	−0·4	−2·0	−0·9	−1·3	−1·6	−1·3	−1·3	**−0·8**	−0·2	−0·2	−0·4	−0·7	−1·5	−0·8
7	**−0·8**	−0·6	**−0·2**	−1·7	**−2·6**	−1·9	−1·9	−1·9	**−2·2**	**−1·4**	−0·6	−0·1	−0·5	−1·4	−2·1	−1·3
8	−0·3	**−0·8**	**−1·9**	**−2·4**	−2·4	**−2·2**	**−2·0**	**−2·3**	−1·4	−1·1	0·0	−0·1	−0·3	**−1·7**	**−2·2**	**−1·4**
9	+0·3	−0·6	−1·5	−2·0	−1·5	−1·9	−2·0	−2·1	−1·5	−0·7	+0·5	+0·1	+0·1	−1·4	−1·9	−1·1
10	**+0·7**	−0·5	−0·8	−1·0	−0·7	−1·7	−1·4	−1·4	−0·6	−0·1	+0·8	+0·4	+0·3	−0·6	−1·3	−0·5
11	+0·7	+0·3	+0·1	+0·1	+0·1	−1·0	−0·8	−0·4	+0·2	+0·4	**+0·9**	**+0·5**	**+0·6**	+0·2	−0·5	+0·1
12	+0·5	+0·6	+0·3	+0·4	+0·3	−0·4	0·0	+0·5	+0·2	+0·4	+0·6	+0·4	+0·5	+0·3	+0·1	+0·3
13	+0·1	+0·5	+0·1	0·4	+0·4	−0·1	+0·3	+0·6	+0·4	+0·1	+0·4	+0·2	+0·3	+0·3	+0·3	+0 3
14	+0·2	+0·3	0·0	−0·1	0·0	−0·3	0·0	+0·2	0·0	+0·1	+0·3	+0·2	+0·2	0·0	0·0	+0·1
15	**+0·2**	**+0·2**	−0·1	−0·1	0·0	−0·3	−0·2	−0·1	−0·3	+0·2	+0·1	+0·2	+0·2	−0·1	−0·1	0·0
16	+0·1	0·0	0·0	−0·1	0·0	−0·2	−0·2	−0·1	0·0	+0·2	+0·1	+0·2	+0·1	0·0	−0·1	0·0
17	+0·1	0·0	0·0	−0·1	0·0	+0·1	−0·2	−0·1	+0·1	+0·3	+0·1	+0·1	+0·1	+0·1	0·0	0·0
18	+0·1	0·0	0·0	−0·1	+0·1	+0·2	−0·1	+0·1	+0·2	+0·3	+0·2	+0·3	+0·1	+0·1	+0·1	+0·1
19	+0·1	0·0	0·0	−0·1	+0·2	**+0·4**	+0·1	+0·3	+0·3	+0·3	+0·2	+0·2	+0·1	+0·1	+0·3	+0·2
20	+0·1	0·0	0·0	0·0	+0·2	+0·5	+0·3	+0·3	+0·4	+0·3	+0·1	+0·2	+0·1	+0·2	+0·3	+0·2
21	+0·1	−0·1	0·0	0·0	+0·2	+0·6	+0·3	+0·3	+0·4	+0·2	+0·1	+0·3	+0·1	+0·1	+0·4	+0·2
22	−0·1	−0·1	−0·2	−0·1	+0·3	+0·6	+0·5	+0·4	+0·4	+0·1	−0·1	+0·1	−0·1	+0·1	+0·4	+0·1
23	−0·3	−0·2	−0·3	−0·1	+0·3	+0·7	+0·6	+0·5	+0·4	−0·1	−0·3	0·0	−0·2	0·0	+0·5	+0·1
Non cyclic change. 24h—oh.	+0·15	−0·05	−0·04	−0·10	+0·25	+0.27	−0·07	+0·27	+0·28	+0·18	+0·32	+0·11				

DIURNAL VARIATION OF H, 1931.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
0	−3	−6	−9	−9	−8	−8	−7	−5	−5	−6	−3	−7	−5	−7	−7	−6
1	−2	−5	−9	−8	−7	−6	−5	−6	−6	−7	−3	−5	−3	−7	−6	−6
2	+1	−3	−7	−5	−2	−1	0	**−9**	−9	−5	+3	−1	0	−7	−3	−3
3	+5	−2	−1	+1	+4	+4	+6	−9	−5	+2	+2	+4	+2	−1	+1	+1
4	+6	**+3**	+10	+13	+12	+10	+11	−2	+1	+13	+18	+8	+9	+9	+8	+9
5	+13	+12	+23	+24	+21	+18	+22	+11	+15	+23	+29	+13	+17	+21	+18	+19
6	**+21**	+18	+32	**+32**	**+26**	**+23**	+25	+20	+21	**+29**	**+30**	**+20**	**+22**	+28	+23	**+25**
7	+19	**+22**	**+33**	+30	+24	+23	+22	+23	**+23**	+28	+24	+19	+21	**+29**	+23	+24
8	+11	+19	+29	+23	+22	+22	+20	**+25**	+23	+18	+15	+16	+15	+23	+22	+20
9	+5	+12	+17	+15	+16	+17	+15	+19	+17	+8	+6	+11	+9	+15	+17	+13
10	**+1**	+7	+5	+9	+8	+9	+6	+9	+8	+3	−1	+6	+3	+6	+8	+6
11	−3	+2	−3	+3	−1	+1	−5	+2	−1	−2	−8	+1	−2	−1	−1	−6
12	−4	−1	−6	−2	−6	−9	−10	−3	−3	−9	−11	−4	−5	−5	−7	−1
13	−5	−3	−8	−7	−9	**−10**	−10	−5	−3	−12	−15	−7	−7	−8	−9	−8
14	−6	−3	−8	**−11**	−11	−10	−9	−8	−6	**−15**	**−16**	**−8**	−8	−10	**−10**	−9
15	−7	−5	−10	−13	**−12**	−9	**−11**	−9	−7	−13	−13	−8	−8	−11	−10	**−10**
16	**−8**	−7	−12	**−15**	−12	−9	−11	−9	−8	−11	−14	−7	−9	−11	**−10**	−10
17	−7	**−9**	−13	−14	−11	−9	−9	−8	−9	−12	−13	−7	−9	**−12**	−9	−10
18	−7	−9	**−15**	−13	−10	−9	−9	−9	**−10**	−9	−9	−7	−8	−12	−9	−10
19	−6	−8	−11	−11	−9	−9	−9	−7	−9	−7	−8	−7	−7	−10	−9	−9
20	−6	−9	−9	−11	−9	−9	−9	−5	−8	−5	−6	−8	−7	−9	−8	−7
21	−7	−9	−11	−12	−9	−9	−9	−5	−7	−6	−5	−8	−7	−9	−8	−8
22	−7	−8	−11	−11	−9	−10	−8	−5	−6	−4	−6	−7	−7	−8	−8	−8
23	−4	−7	−9	−9	−8	−9	−8	−5	−6	−3	−5	−7	−6	−7	−8	−7
Non-cyclic change. 24h—oh.	+6·4	+4·4	+2·3	+2·0	+8·7	+5·4	+3·5	+6·7	+8·9	+2·2	+5·1	+5·8				

DIURNAL VARIATION OF Y, 1931.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
0	−5	−3	−3	0	+4	+8	+8	+5	+3	−1	−4	−2	−4	0	+6	+1
1	−6	−3	−2	+6	+12	+15	+14	+6	+1	−5	−5	−5	−5	+3	+14	+4
2	−6	−3	+5	+17	+21	**+22**	+24	**+23**	+14	+8	−7	−8	**−6**	+11	+23	+9
3	−1	+3	+14	**+25**	**+25**	+21	**+26**	+23	**+17**	**+11**	−5	**−10**	−3	**+17**	**+24**	**+12**
4	+4	**+10**	**+17**	+22	+17	+14	+15	+12	+9	+6	−3	−6	+1	+13	+14	+10
5	+3	+7	+14	+13	−1	+3	−2	−6	−4	+4	−6	−4	0	+7	−1	+2
6	−5	0	+2	−4	−21	−10	−15	−17	−14	−14	**−9**	−2	−4	−7	−16	−9
7	**−9**	−7	−2	−19	**−28**	−20	−20	−21	**−24**	**−15**	−6	−2	−6	−15	−23	**−15**
8	−4	**−10**	**−21**	**−26**	−27	**−24**	**−22**	**−25**	−15	−12	0	−1	−3	**−19**	**−24**	−15
9	+3	−6	−16	−22	−17	−20	−22	−22	−16	−7	+6	+2	+1	−15	−20	−11
10	+7	−5	−8	−11	−7	−18	−15	−15	−6	−1	+9	+4	+4	−7	−14	−6
11	**+8**	+4	+1	+1	+1	−11	−8	−4	+2	+4	**+10**	**+6**	**+7**	+2	−6	+1
12	+5	+7	+3	+5	+4	−4	0	+6	+2	+4	+7	+4	+6	+3	+1	+3
13	+1	+5	+1	+4	+4	−1	+3	+6	+4	+1	+5	+2	+3	+3	+3	+3
14	+2	+3	0	−1	0	−3	0	+3	0	+1	+3	+3	+3	0	0	+1
15	+2	+2	−1	−1	0	−3	−3	−1	−3	+2	+1	+2	+2	−1	−1	0
16	+1	0	0	−2	0	−2	−2	−1	0	+2	+1	+2	+1	0	−1	0
17	+1	0	0	−1	0	+1	−2	−1	+1	+3	+2	+2	+1	+1	0	0
18	+1	0	0	−1	+1	+2	−1	+1	+3	+3	+2	+3	+1	+1	+1	+1
19	+1	0	0	−1	+2	+5	+1	+3	+4	+3	+2	+3	+1	+2	+3	+2
20	+1	0	0	0	+2	+6	+3	+4	+4	+3	+1	+3	+1	+2	+4	+2
21	+1	−1	0	0	+2	+7	+4	+4	+5	+2	+1	+3	+1	+1	+4	+2
22	−2	−1	−2	−1	+3	+7	+5	+4	+5	+1	−1	+1	−1	+1	+5	+2
23	−3	−2	−3	−1	+3	+7	+7	+5	+4	+1	−4	0	−2	0	+5	+1

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

Hours.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Group means.			Year.
	I	I	II	II	III	III	III	III	II	II	I	I	I	II	III	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	
0	+3	−1	+4	+5	+2	+4	+2	+4	+3	+4	−1	+1	0	+4	+3	+3
1	+2	−1	+6	+10	+6	+7	+5	**+15**	+6	+6	−2	0	0	+7	**+9**	+5
2	+3	+1	**+9**	**+12**	+7	+5	+5	+13	**+8**	**+7**	−3	−2	−1	**+9**	+8	+5
3	**+5**	+6	+8	+6	+1	0	+3	0	+1	−1	−2	+2	**+3**	+3	+1	+2
4	+1	+4	−1	−7	−8	−8	−11	−20	−11	−11	−2	**+6**	+2	−8	−12	−6
5	−9	+1	−10	−20	**−25**	−16	−14	**−31**	−19	**−16**	**−5**	−7	−5	−16	**−22**	−14
6	**−17**	−4	−19	**−27**	−25	−22	**−15**	−26	**−23**	−16	−1	**−8**	**−8**	**−21**	−22	**−17**
7	−13	−6	**−22**	−25	−18	**−23**	−12	−22	−20	−12	+2	−7	−6	−20	−19	−15
8	−5	−4	−17	−16	−7	−15	−7	−16	−10	−4	**+5**	−4	−2	−11	−11	−8
9	+2	−1	−3	−3	+4	−5	−2	−5	+1	+1	+5	+1	+1	−1	−2	−1
10	+5	0	+5	+6	+9	+1	+5	+2	+6	+5	+4	+1	+2	+5	+4	+4
11	+4	+4	+6	+9	**+11**	+7	**+8**	+6	+7	+5	+3	+2	+3	+7	+8	**+6**
12	0	+3	+3	+5	+9	**+9**	+8	+7	+2	+1	0	+1	+1	+3	+9	+4
13	+1	+1	+2	+3	+6	+7	+5	+4	+1	0	−1	+1	+1	+1	+6	+3
14	+2	0	+2	0	+3	+4	0	+2	+1	+1	0	+3	+1	+1	+2	+1
15	+2	0	+2	+2	+4	+4	0	+3	+3	+2	0	+2	+1	+2	+3	+2
16	+2	0	+3	+3	+4	+5	+1	+5	+3	+3	0	+2	+1	+3	+4	+3
17	+2	+1	+3	+4	+5	+6	+2	+7	+5	+4	+1	+2	+2	+4	+5	+3
18	+2	+1	+3	+5	+5	+6	+3	+8	+6	+4	+1	+3	+2	+5	+5	+4
19	+2	+1	+3	+6	+4	+6	+4	+9	+6	+4	+1	+2	+1	+5	+5	+4
20	+1	0	+3	+6	+3	+5	+3	+9	+6	+4	0	+1	+1	+5	+5	+3
21	+1	−1	+3	+6	+3	+5	+3	+9	+6	+4	−1	0	0	+5	+5	+3
22	+1	−1	+2	+6	+2	+4	+2	+9	+6	+3	−1	−1	−1	**+4**	+4	+3
23	+1	−2	+2	+6	+2	+3	+2	+9	+5	+3	−2	−1	−1	+4	+4	+2
Non-cyclic change. (24h—oh.)	−5·3	+3·6	−1·9	−11.2	+5·9	+5·9	+6·9	−7·5	−3·2	+3·1	+3·6	+10·4				

DIURNAL VARIATION OF I, 1931.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
0	+0·3	+0·1	+0·6	+0·7	+0·4	+0·6	+0·3	+0·5	+0·4	+0·5	0 0	+0·3	+0·2	+0·5	+0·5	+0·4
1	+0·3	+0·1	+0·8	+1·0	+0·7	+0·7	+0·6	**+1·4**	+0·7	**+0·7**	−0·1	+0·2	+0·1	+0·8	**+0·9**	+0·6
2	**+0·2**	+0·1	**+1·0**	**+1·1**	+0·6	+0·3	+0·4	+1·3	**+0·9**	+0·7	−0·3	−0·1	0·0	**+0·9**	+0·7	+0·5
3	+0·2	**+0·5**	+0·6	+0·4	−0·2	−0·1	0 0	+0·3	+0·3	−0·2	−0·2	0·0	+0·1	+0·3	0 0	+0·1
4	−0·1	+0·2	−0·4	−1·1	−1·0	−1·0	−1·2	−1·4	−0·7	−1·3	−0·3	+0·1	−0·1	−0·9	−1·1	−0·7
5	**−1·2**	−0·3	−1·5	−2·4	−2·7	−1·8	−1·8	**−2·7**	−1·9	−2 0	**−1·4**	−1·0	−1·0	−1·9	−2·3	−1·7
6	**−2·0**	−1·0	−2·5	**−3·2**	**−2·9**	**−2·5**	**−2·0**	−2·7	**−2·4**	**−2·2**	−1·2	**−1·3**	**−1·4**	**−2·6**	**−2·5**	**−2·2**
7	−1·7	**−1·3**	**−2·9**	−2·9	−2·2	−2·5	−1·7	−1·7	−2·3	−1·9	−0·4	−1·2	−1·1	−2·5	−2·0	−1·9
8	−0·8	−1·0	−2·2	−2·0	−1·4	−1·9	−1·3	−2·1	−1·5	−1 0	+0·2	−0·9	−0·7	−1·7	−1·7	−1·4
9	−0·1	−0·5	−0·8	−0·4	−0·3	−0·9	−0·8	−1·1	−0·6	−0·2	−0·1	−0·4	−0·2	−0·5	−0·8	−0·5
10	+0·3	−0·2	+0·2	+0·1	0·0	−0·3	+0·2	−0·2	+0·1	+0·3	+0·3	−0·1	+0·1	+0·2	−0·1	+0·1
11	+0·4	+0·2	+0·5	+0·6	**+0.8**	+0·5	+0·8	+0·3	+0·5	+0·5	+0·5	+0·1	+0·3	+0·5	+0·6	+0·5
12	+0·1	+0·3	+0·4	+0·5	+0·8	**+1·0**	**−1·0**	+0·6	+0·3	+0·5	+0·4	+0·2	+0·3	+0·4	+0·9	+0·5
13	+0·3	+0·1	+0·4	+0·4	+0·8	+1·0	+0·7	+0·5	+0·2	+0·4	+0·4	+0·4	+0·3	+0·3	+0·7	+0·5
14	0 0	+0·1	+0·4	+0·4	+0·7	+0·7	+0·3	+0·4	+0·3	+0·5	**+0·6**	**+0·5**	+0·3	+0·4	+0·5	+0·4
15	**+0·5**	+0·2	+0·6	+0·6	+0·7	+0·6	+0·4	+0·7	+0·4	+0·7	+0·5	+0·5	+0·4	+0·6	+0·5	+0·5
16	+0·5	+0·3	+0·6	+0·8	+0·7	+0·7	+0·5	+0·6	+0·6	+0·6	+0·5	+0·4	+0·4	+0·7	+0·7	+0·6
17	+0·5	+0·3	+0·7	+0·8	+0·8	+0·8	+0·5	+0·8	+0·7	+0·7	+0·6	+0·5	**+0·5**	+0·7	+0·7	+0·6
18	+0·5	+0·5	+0·8	+0·9	+0·7	+0·8	+0·5	+0·9	+0·9	+0·6	+0·4	+0·5	+0·5	+0·8	+0·7	**+0·7**
19	+0·3	+0·4	+0·7	+0·8	+0·6	+0·7	+0·6	+0·9	+0·8	+0·6	+0·4	+0·4	+0·4	+0·7	+0·7	+0·6
20	+0·3	+0·3	+0·5	+0·8	+0·6	+0·7	+0·5	+0·9	+0·7	+0·5	+0·2	+0·4	+0·3	+0·6	+0·7	+0·5
21	+0·3	+0·3	+0·6	+0·8	+0·5	+0·6	+0·5	+0·8	+0·7	+0 5	+0·2	+0·3	+0·3	+0·7	+0·6	+0·5
22	+0·2	+0·2	+0·5	+0·8	+0·4	+0·7	+0·5	+0·9	+0·6	+0·3	+0·1	+0·2	+0·2	+0·5	+0·6	+0·5
23	+0·3	+0·2	+0·4	+0·7	+0·4	+0·5	+0·4	+0·9	+0·6	+0·3	0·0	+0·1	+0·1	+0·5	+0·5	+0·4

DIURNAL VARIATION OF F, 1931.

[INTERNATIONAL QUIET DAYS, GREENWICH MEAN TIME.]

	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
0	−1	−6	−6	−6	−6	−6	−5	−3	−4	−3	−5	−5	−4	−5	−5	−5
1	−1	−5	−5	−3	−3	−3	−2	+1	−3	−4	−3	−4	−3	−4	−2	−3
2	+2	−2	−3	0	−1	−7	+3	−2	−5	−2	+1	−2	0	−2	−1	−1
3	+7	+1	+3	+3	+4	+4	+7	−8	−4	+1	+1	+4	+3	+1	+2	+2
4	+6	+4	+9	+8	+8	+6	+5	**−10**	−4	+7	+15	+10	+9	+5	+2	+5
5	+8	+11	+17	+13	+8	+9	+14	−3	+5	+14	+24	+9	+13	+12	+7	+11
6	**+11**	+14	**+20**	**+17**	+13	+12	**+16**	+6	+ 9	+19	**+27**	**+14**	**+17**	+16	+12	**+15**
7	+11	**+17**	+20	+17	+14	+11	+15	+11	**+13**	**+20**	+21	+14	+16	**+17**	+13	+15
8	+7	+15	+19	+14	**+17**	**+13**	+15	**+16**	+17	+15	+16	+13	+13	+16	**+15**	+15
9	+5	+10	+15	+12	+16	+13	+13	+15	+15	+8	+7	+10	+8	+13	+14	+12
10	+3	+6	+7	+11	+11	+8	+7	+9	+9	+5	+1	+6	+4	+8	+9	**+7**
11	−1	+3	0	−7	+4	+4	−1	+4	+2	0	−6	+2	0	+2	+3	+2
12	−4	0	−4	0	−1	−4	−5	−1	−1	−7	−10	−3	−4	−3	−3	−3
13	−4	−2	−6	−6	−6	−6	−7	−3	−3	−11	**−14**	−6	−6	−7	−5	−5
14	−5	−3	−7	−10	**−9**	−6	−9	−6	−5	**−13**	−14	−6	−7	**−9**	−7	**−8**
15	**−6**	−4	−8	−11	−9	−7	**−10**	−7	−5	−11	−12	−6	−7	−9	**−8**	−8
16	−6	−6	−9	**−12**	−9	−6	−9	−6	**−6**	−9	−13	−5	**−8**	−9	−8	−8
17	−5	−7	−10	−11	−8	−6	−7	−5	−6	−9	−11	−6	−7	−9	−6	−8
18	−5	**−8**	**−12**	−9	−7	−6	−6	−4	−6	−7	−7	−5	−7	−9	−6	**−7**
19	−5	−7	−8	−8	−6	−6	−6	−3	−6	−5	−7	−6	−6	−7	−5	−6
20	−5	−7	−7	−8	−7	−6	−7	−1	−5	−3	−6	**−7**	−6	−6	−5	−6
21	−6	−8	−8	−8	−7	−6	−7	0	−3	−3	−5	−7	−7	−6	−5	−6
22	−6	−8	−9	−9	−7	−7	−7	0	−3	−2	−6	−7	−7	−5	−5	**−6**
23	−4	−7	−7	−7	−7	−7	−7	−1	−3	−1	−5	−7	−6	−4	−5	−5

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

JANUARY. 0° PLUS TABULAR QUANTITIES.

Date.	Hours. (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	9·7	9·7	9·9	9·9	9·3	9·3	9·7	10·1	10·4	10·1	9·1	9·1	8·1	9·6	9·3
2	9·9	10·0	10·9	10·7	9·6	9·2	9·5	9·7	9·7	9·8	9·4	9·1	9·3	9.3	9·4
3†	9·9	10·1	10·2	10·3	9·3	9·1	9·4	9·5	9·5	9·2	9·3	9·7	9·7	9·5	9·3
4	9·8	9·9	10·1	9·9	9·7	9·9	9·7	9·5	9·1	9·4	9·6	9·1	9·1	9·1	9·1
5	9·9	9·9	10·1	9·9	9·7	9·7	9·4	8·8	9·2	9·7	9·7	9·5	9·4	9·4	9·3
6	9·1	9·2	10·3	9·7	9·7	9·7	9·6	9·7	9·8	10·4	9·9	9·4	9·4	9·3	9·3
7†	10·3	10·3	10·4	10·1	9·4	9·5	9·9	10·1	9·8	9·5	8·9	8·8	9·0	9 3	9·3
8†	10·1	10·3	10.3	9·7	10·2	10·8	11·5	11·5	10·7	9·8	9·0	8.7	8·9	9·5	9·7
9	10·7	10·2	9·9	9·2	8·9	10·2	11·3	11·5	11·5	10·8	10·5	10·0	9·9	9·9	9·5
10	8·9	9·7	10·1	10·1	9·8	9·7	10·0	10·8	10·1	9·2	8·7	8·3	8·7	8·9	9·1
11	9·8	9·8	9·7	8·8	7·9	8·6	9·8	10·9	10·7	9·9	9·7	9·1	9·0	9·2	9·2
12	9·6	9·8	9·8	8·8	8·6	8·7	8·9	9·1	9·0	9·3	9·3	8·9	8·9	9·1	9·3
13	9 5	9·5	9·5	8·8	8·8	9·7	10·9	11·5	11·3	10·7	9·5	8·7	8·7	8·8	8·9
14	9·7	9·7	9·6	8·9	8·7	8·9	10·2	11·0	10.9	10·0	9·6	9·0	8·9	9·0	9·1
15	9·7	9·8	9·8	8.7	7·9	9·5	**11·7**	11·3	10·3	9·6	9·6	9·1	8·9	8·9	8·9
16	10·2	10·6	10·8	10·0	9·8	10.3	10·5	10·4	9·8	8·0	**7·5**	7·9	7·8	8·2	8·5
17	10·7	10·3	10·8	9 8	8·9	8·8	9·7	9·4	9·2	8·9	8·7	8·3	8·7	8·5	8·6
18	10·5	10 8	10·6	10·0	9·2	8·6	8·3	8·7	8·8	8·2	8·9	8·8	9·3	9·7	9·3
19	10·3	10·5	10·5	9·9	9·0	9·4	10·1	10·0	9·2	8·8	8·3	8·3	8·6	9·0	9·4
20	10·9	10·7	10·5	10·4	9·5	9·5	10·3	10·8	9·9	8·9	8·1	7·8	8·3	9·0	9·6
21	9.9	10·1	10·5	10·7	10·2	9·9	10·1	10·2	9·9	9·4	8·7	8·3	8·7	9·5	9·5
22	10·1	10·3	10·3	10·1	9·8	9·8	10·5	10·7	10·1	9·0	8·1	8·2	9·0	9·7	9·4
23	10·1	10·0	9 9	10·0	10·7	10·7	10·9	11·1	11·1	9·9	8·9	8·9	9.2	9·8	9·6
24†	10·1	10·2	9 9	9·4	9·6	9·8	10·8	11·3	10·6	9·1	8·3	7·9	8·9	9·9	9·9
25	10·0	10·1	10 8	11·0	11·1	11·1	11·6	11·4	10.5	9·9	9.3	8·9	8·9	9·0	9·5
26	10 1	10·0	9·9	9·0	8·9	9·2	10·0	10·6	10·4	9·8	9·1	8·9	9·0	9·4	9·5
27	10 0	10 0	9 5	9·0	8 9	9·5	10·5	11·0	11·3	11·2	10·5	9·7	9·1	9·5	9·9
28	9·5	9·5	9·3	8·6	8·4	9·5	10·9	11·6	11·5	11·0	10.4	9·9	9·9	9·8	9·8
29	9·9	9·9	9·9	9·4	8·6	8·4	9.0	10·6	11·0	10·6	10·1	9·5	9·5	9·7	9·5
30†	10·1	10·0	10·0	9·4	8·2	8·1	9·2	9·9	9·6	9·8	9·9	9·9	9·9	9·9	9·8
31	10·5	10·6	10·6	10·4	9·9	9·4	9·7	10·5	10·4	10·2	10·2	10·1	9·9	9·6	9·6
Mean . .	10·0	10·1	10·1	9·7	9·3	9·5	10·1	**10·4**	10·2	9·7	9·3	**9·0**	9·1	9·3	9·4
Mean† . .	10·2	10·3	10.3	9·8	9·3	9·5	10·2	**10·5**	10·1	9·5	9·1	**9·0**	9·3	9·6	9·6

FEBRUARY.

1	10·0	10·2	10·0	9·5	8·8	8·5	9·0	9·5	9·6	9·2	9·5	9·9	10·0	10·0	10·0
2	9·6	10·3	10·1	10·1	9·8	10·1	10·2	10·9	11·1	10·1	9·6	9·7	9·9	9·5	9·5
3	10·1	10·3	10·6	10·1	9·9	9·0	9·5	9·9	9·9	9·3	8·9	9·1	9·7	9·9	9·7
4	9·9	9·9	9·8	9·7	10·0	10·3	10·5	9·9	9·9	8·9	9·0	9·0	9·9	9·3	9·3
5	9·6	9·9	10·0	9·8	9·5	9·6	10·3	10·9	10·1	9·0	8·7	8·5	8·8	9·0	9·3
6†	9·7	9·8	9·8	9·4	8·9	9·2	10·0	10·5	10·7	10.2	9·9	8·9	8·9	8·9	9·1
7	9·7	9·7	9·6	9·0	8·9	9·0	9·5	10·1	10·6	10·3	9·5	8·9	8·9	9·0	9·3
8	8·9	9·1	9·7	9·9	9·7	9·7	10·1	11·0	11·0	10·3	10·0	9·7	9·2	9·2	9·3
9	9·6	9·9	10·0	9·8	9·0	9·0	9·0	9·1	9·9	9·8	9·0	8·4	8·8	9·1	9·2
10†	9·9	10·0	10·1	10·0	9·3	9·3	9·7	10·1	10·5	10·4	10·3	9·8	9·2	9·2	9·3
11	10·1	10·0	10·0	9·7	8·8	8·8	9·2	10·1	10·4	10·7	10·2	10·0	8·9	9·9	9·9
12†	10.1	10·1	10·2	9·7	9·1	9·1	9·3	9·6	9·6	9·7	10·0	9·2	9·2	9·5	9·5
13	10·1	10·3	10·2	9·9	9·2	9·0	9·1	9·3	9·3	9·1	9·0	9·0	9·7	9·9	10·0
14	10·1	11·0	11·3	10·9	9·5	9·4	9·2	9·7	9·4	9·2	9·1	8·1	8·7	8·9	8·5
15	10·1	10·1	10·2	9·6	9·1	9·1	10·2	10·9	10·7	9·9	9·5	9·2	9·0	9·2	8·3
16	10·1	10·1	10·0	9·2	8·7	8·7	9·2	10·2	10·9	10·3	9·7	9·1	9·2	9·6	9·3
17	9·9	9·9	10·0	9·2	8·9	8·5	9·1	9·4	9·7	9·9	9·6	9·1	9·3	9·9	9·7
18	10·2	10·1	10·1	9·2	8·9	8·7	9·2	10·2	10·5	10·1	9·0	8·5	9·1	9·6	9·6
19	10·2	10.0	9·5	9·1	8·7	8·4	9·1	9·6	10·2	10·2	9·9	9·2	9·1	9·2	9·6
20†	10·1	10·0	9·8	9·1	8·9	9·3	10·2	11·1	11·4	10·6	9·6	9·1	9·1	9·2	9·7
21†	10·1	10·0	9·9	9·1	8·2	8·7	9·4	10·3	10·8	10·6	11·1	10·0	9·2	9·4	9·5
22	9·8	9·4	9·3	9·2	9·0	9·3	10·5	11·3	11·3	10·7	10·1	9·2	9·2	9·5	9·8
23	9·7	9·3	9·4	9·2	9·1	10·4	11·3	11·6	12·3	11·7	10·7	9·8	9·2	9·3	9·4
24	9·4	9·4	9·9	9·4	9·4	9·6	9·4	11·1	11·3	11·1	10·2	9·6	8·7	9·6	9·9
25	8·6	9·1	9·1	8·7	8·2	8·7	9·2	11·1	10·3	10·1	9·4	9·4	9·2	9·4	9·3
26	8·4	9·0	9·4	9·0	9·0	9·3	10·2	11·2	11·1	10.2	9·5	9·2	9·0	9·2	9·4
27	9·1	8·9	9·1	8·4	8·4	9·1	9·9	11·1	11·4	11.5	11·0	9·9	9.1	0·2	9·2
28	9·5	9·3	9·2	9·1	9·0	9·1	9·8	11·0	10·9	10·2	9·3	8·6	8·7	9·3	9·5
Mean . .	9·7	9·8	9·9	9·5	**9·1**	9·2	9·7	10·4	**10·5**	10·1	9·7	9·2	9·1	9·4	9·4
Mean† . .	10·0	10·0	10·0	9·5	**8·8**	9·1	9·7	10·3	**10·6**	10·3	10·2	9·4	9·1	9·3	9·5

† Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

JANUARY. 0° PLUS TABULAR QUANTITIES.

Hours. (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′	
9·3	9·2	9·2	9·2	9·1	9·0	9·0	9·0	9·3	9·4	11 18	8·5	7 39	10·5	1
9·4	9·5	9·5	9·5	9·5	9·5	9·5	9·6	9·7	9.6	10 58	8·7	2 10	11·1	2
9·2	9·3	9·3	9·2	9·2	9·3	9·3	9·7	9·8	9·5	4 48	8·7	2 30	10·5	3†
9.3	9·4	9·5	9·5	9·6	9·6	9·8	10·0	9·9	9·6	11 30	8·7	1 52	10·3	4
9·3	9·4	9·4	9·4	9·5	9·5	9·7	9·8	9·9	9·5	7 6	8·7	2 13	10·2	5
9·3	9·5	9·6	9·7	9·7	9·7	9·8	9·9	10·1	9·7	13 30	8·9	2 0	10·4	6
9·3	9·6	9·7	9·7	9·8	9·8	9·9	9·9	10·1	9·7	11 18	8·7	2 18	10·6	7†
9·7	9.8	9·8	9·9	9·9	9·9	9·9	10·3	10·5	**10·0**	11 30	8·7	6 30	11·7	8†
9·6	9·6	9·6	9·6	9·6	9·5	9·3	9·2	8·8	9·9	23 26	8·1	7 31	**12·1**	9
9·1	9·1	9·3	9·3	9·3	9·6	9·5	9·5	9·6	9·5	11 19	7·9	7 10	11·1	10
9·4	9·5	9·5	9·5	9·3	9·2	8·9	9·1	9·3	9·4	4 8	7·6	6 58	11·1	11
9·0	8·9	8·9	9·0	8·8	8·8	9·0	9·1	9·0	**9·1**	3 53	8·0	1 52	10·1	12
8 9	9.1	9·1	9·2	9.0	9·0	10·1	9·3	9·4	9·5	3 44	8·3	6 26	11·5	13
9·1	9·2	**9·3**	9·4	9·6	9·6	9·6	9·6	9·7	9·5	3 48	8·1	7 11	11·4	14
9·1	9·3	9·6	9·7	9·7	9·7	9·7	9.7	9·8	9·6	3 56	7·7	6 18	11·9	15
8·4	8·7	8·9	9·2	9·3	9·5	9·4	9·9	9.9	9·3	9 48	**6·9**	1 22	11·0	16
8·6	8·9	9·2	9·2	9·8	9·8	9·9	9·9	10·1	9·4	11 30	7·7	1 54	10·9	17
8·8	8·7	8·7	8·9	9·2	9·6	9·8	9·9	10·2	9·3	9 2	7·7	1 20	11·0	18
9·4	9·3	9·2	9·3	9·5	9·8	9·9	10·0	10·2	9·5	10 36	7·5	1 0	10·7	19
9·5	9·2	8·9	8·8	8·8	9·1	9·6	9·8	9·9	9·5	11 19	7·7	0 8	11·2	20
9·5	9·5	9·4	9·3	9·3	9·3	9·5	9·9	9·9	9·7	11 30	8·1	2 36	10·9	21
9·5	9·9	9·9	9·9	9·9	9·9	9·9	10·0	10·0	9·7	10 42	7·8	6 51	10·8	22
9·4	9·5	9·5	9·5	9·5	9·6	9·9	10·0	10·1	9·9	10 34	8·4	7 44	11.6	23
9·9	9·9	9·9	9·9	9·9	9·9	9·9	10·0	10·0	9·8	10 54	7·9	7 5	11·9	24†
9·5	9·5	9·9	9·9	10·0	9·9	9·7	9·6	9·4	10·0	11 32	8·5	6 11	11·9	25
9·5	9·5	9·5	9·4	9·5	9·6	9·8	9·9	9·9	9·6	3 42	8·4	7 37	11·0	26
9·9	9·7	9·6	9·5	9·5	9·4	9·7	9·7	9·0	9·8	4 0	8·4	9 19	11·8	27
9 7	9·7	9·7	9·6	9·6	9·4	9·4	9·4	9·6	9·8	3 54	7·8	7 17	12·1	28
9·5	9·6	9·5	9·5	9·6	9·5	9·5	9.6	10·0	9·7	4 34	7·9	8 16	11·4	29
9·8	9·8	9·8	9·8	9·8	9·8	9·8	9·9	10·0	9·7	4 44	7·9	23 55	10·6	30†
9·6	9·6	9·5	9·5	9·4	9·4	9·5	9·5	9·9	9·9	19 8	9·1	2 10	10·9	31
9·3	9·4	9·4	9·5	9·5	9.5	9·6	9·7	9·8	9·6					Mean.
9·6	9·7	9·7	9·7	9·7	9·7	9·7	9·9	10·0	9·7					Mean†

FEBRUARY.

10·0	10·0	9·9	9·9	9·9	9·6	9·6	9·2	9·0	9·6	4 56	8·0	0 54	10·6	1
9·5	9·5	9·3	9·3	9·3	9·5	9·5	9·5	9·7	9·8	0 3	9·1	7 40	11·7	2
9·7	9·6	9·6	9·5	9·1	9·0	9·3	9.7	9·9	9.7	5 22	8·8	2 11	11·2	3
9·2	9·3	9·1	9·0	8·9	8·8	8·8	8·7	8·9	9·4	22 0	8·1	7 14	10·6	4
9·3	9·5	9·7	9·7	9·7	9·3	9·3	9·2	9·6	9·5	10 58	8·1	7 4	11·0	5
9·4	9·4	9·4	9·3	9·3	9·4	9·4	9·6	9·7	9·5	11 30	8·7	7 28	10·9	6†
9·4	9·4	9·6	9·7	9·7	9·6	9·4	9·1	8·9	9·4	3 51	8·5	8 18	10·9	7
9·5	9·6	9·6	9·6	9·5	9·6	9·6	9·6	9·5	9·7	0 0	8·9	7 42	11·6	8
9·7	9·8	9·9	9·8	9·8	9·8	9·9	9·8	9·8	9·5	11 19	8·2	2 18	10·3	9
9·3	9·6	9·6	9·7	9·6	9·7	9·7	9·9	10·1	9·8	12 30	9·1	7 50	10·9	10†
9·8	9·8	9 9	9·8	9·5	9·3	9·3	9·4	9·7	9·7	4 30	8·6	9 2	11·0	11
9·6	9·6	9·6	9·6	9·6	9·7	9·8	9·9	10·0	9·6	11 33	9·0	2 0	10·6	12†
9·7	9·8	9·6	9·5	9·8	10·1	11·0	11·3	9·7	9·7	7 21	8·7	21 32	**13·0**	13
9·1	9·2	9·3	9·3	9·7	9·6	9·6	9·9	10·3	9·5	10 57	7·7	1 52	12·0	14
8·4	8·8	9·1	9·1	9·1	9·1	9·7	10·1	9·9	9·5	15 0	8·1	7 30	11·4	15
9·3	9·5	9·6	9·7	9·7	9·7	9·8	9·8	9·8	9·6	4 26	8·2	8 6	11·2	16
9·6	9·7	9·9	10·0	9·9	9·9	9·9	10·0	10·1	9·6	5 6	8·3	1 54	10·3	17
9·7	9·6	9·7	9·8	9·8	9·9	10·0	9·9	10·1	9·6	10 38	8·3	7 44	10·8	18
9·3	9·3	9·4	9·3	9·6	9·9	10·0	10·1	10·2	9·5	4 50	8·2	8 34	10·9	19
9·8	9·8	9·8	9·8	9·8	9·8	9·9	9·9	9·9	9·8	11 42	8·5	7 56	11·7	20†
9·5	9·9	9·9	10·0	10·0	10·0	10·0	9·8	9·7	9·8	3 42	8·0	10 0	11·2	21†
9·9	10·1	10·1	10·1	9·8	9·6	9·6	9·8	9·7	9·9	3 55	8·5	7 58	11·3	22
9·8	9·9	9·9	9·9	9·8	9·4	9·6	9·6	9·5	**10·0**	3 42	8·8	8 33	12·3	23
9·6	8·4	8·4	7·6	7·6	**7·2**	8·0	7·5	8·1	**9·2**	19 36	**6·5**	7 6	11·9	24
9·2	9·3	9·2	9·0	9·2	9·1	9·3	9·4	8·8	9·2	3 49	7·8	7 58	10·7	25
9·3	9·1	9·3	9·4	9·4	9·3	9·3	9·5	9·3	9·5	0 22	8·1	6 54	11·6	26
9·3	9·5	9·9	9·7	9·5	10·0	9·8	9·8	9·7	9·7	3 34	8·1	8 46	12·1	27
9·7	9·6	9.5	9·7	9·7	9·8	9·8	9·8	9·8	9.6	11 30	8·2	7 39	11·3	28
9·5	9·5	9.6	9·5	9·5	9·5	9·6	9·6	9·6	9·6					Mean.
9·5	9·7	9.7	9·7	9·7	9·7	9·8	9·9	9·9	9·7					Mean†

* The daily mean values of declination derived from 24 hourly values have been corrected for progressive change by 1/48th of the difference between the values of the initial and terminal hours.

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

MARCH. 0° PLUS TABULAR QUANTITIES.

Date.	Hours. (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	9·8	9·5	9·3	8·5	8·5	9·2	10·0	10·7	11·3	11·0	10·2	9.3	9·3	9·3	9·5
2	9·8	9·4	9·1	8·3	8·5	9·5	10·0	10·6	10·9	10·8	10·0	9·5	9·2	9·3	9·3
3	9·9	9·5	9·1	8·5	8·9	10·0	10·9	11·6	11·5	11·0	10·4	9·7	9.2	9·3	9·6
4	9·5	9·3	9·0	8·2	8·0	8·5	8·7	9·3	10·4	10·2	9·9	9·4	9·4	9·6	9·7
5	10·2	10·0	9·3	8·2	7·9	8·8	10·1	10·4	10·3	10·1	9·3	8·5	8·4	9.0	9·4
6†	10·1	9·7	9·2	8·4	8·7	9·6	10·4	11·2	11·5	10·9	10·0	9·2	8·7	9·1	9·4
7	9·9	9·6	9·0	8·2	8·2	8·7	10·1	11·2	11·3	11·3	11·2	10·5	9·6	9·3	9·8
8	10·1	9·8	9·5	8·8	8·3	9·1	10·0	11·1	11·9	11·4	10·9	10·3	10·2	10.0	9·9
9	10·2	9·9	9·4	8·3	8·3	8·9	10·2	11·9	11·9	11·1	10·0	9·4	9·3	9·2	9·3
10	10·0	9·8	9·4	8·8	8·5	9·4	10·2	11·2	11·5	11·3	10·4	9·9	9·4	9·3	9·4
11†	10·2	10·2	9·9	9·3	9·1	8·9	9·4	10·2	10·6	10·3	9·8	9·7	9·7	9·6	9·7
12	10·1	9·9	9·2	8·2	7·5	8·1	9·3	10·6	11·1	10·8	10·5	10·5	10·8	10·7	10·5
13	10·3	10·2	9·1	7·8	7·2	7·4	8·9	9.5	10·1	10·0	9·7	9·6	9·5	9·6	10·0
14	9·5	9·4	9·2	8·2	8·2	9·1	10·0	11·0	11·2	10·2	9·3	9·2	9·6	9·4	9·3
15	10·1	10·0	9·3	8·5	8·2	8.1	9·0	10·3	10·7	10·1	9·2	9·2	9·3	9 6	9·8
16	10·3	10·3	9·5	8·3	8·2	8·9	10·1	11·3	11·4	10·8	10·3	9·7	9·5	9·7	10·2
17	10·1	10·0	9·0	7·5	**6·6**	7·1	9·2	11·4	12·4	12·5	12·1	11·1	10·4	10·2	10·0
18†	10·5	10·4	9·4	8·3	7·5	7·9	9·2	11·2	12·1	11·4	11·7	10.3	10·5	10·3	10·1
19†	10·3	10·3	9·7	8·8	8·4	8·6	10·2	11·9	**13·1**	13·0	11·7	10·4	9·7	9·9	10·1
20	10·3	10·2	9·2	7·7	7·0	7·1	8·6	10·3	11·0	10·9	10·2	9·9	9·9	10·1	10·2
21	9·4	9·6	9·6	8·3	7·9	7·4	8·7	10·5	12·2	11·5	10·3	9·6	9·3	9·9	10·1
22	9·8	9·7	8·7	7·9	7·3	7·2	8·4	10·6	11·3	11·2	10·4	10·2	10·2	10·2	10·2
23	9·3	9·5	9·6	9·0	8·6	9·3	10·3	11·3	11·7	11·1	10·3	10·2	9·8	9·5	9.6
24	9·5	9·2	8·7	8·3	9·0	9.8	10·8	11·6	12·0	11·5	10·9	10.5	10·4	10·2	10·0
25	9·4	9·2	8·3	7·3	7·1	7·6	9·0	10·3	11·2	10·8	10·1	9·3	9·5	10·0	10·0
26	9·5	9·3	8·7	8·2	8·4	8·8	9·2	10·1	11·0	10·7	10·0	9·7	9·6	9·7	9·5
27	9·6	9·3	9·0	8·4	8·4	8·2	9·5	11·0	11·7	11·8	11·0	10·3	9·7	9·8	10·1
28	9·1	8·8	7·9	7·1	7·1	7·9	9·6	10·9	11·1	10·7	9·3	9·0	9·3	9·8	9·8
29	9.2	9·1	8·9	8·5	8·2	8·0	9·0	10·5	11·2	11·0	9·9	9·5	9·6	9·9	10·0
30†	9·3	9·6	9·0	8·4	7·9	8·1	9·2	10·8	11·3	10·9	9·9	9·4	9·5	9·7	9·7
31	9·9	9·8	8·7	7·4	7·0	7·9	9·8	11·2	11·8	11·5	10·7	9·6	9·1	9·3	9·5
Mean .	9·9	9·7	9·1	8·2	**8·0**	8.5	9·6	10·8	**11·4**	11·0	10·3	9·8	9·6	9·7	9·8
Mean† .	10·1	10·0	9·4	8·6	**8·3**	8·6	9·6	10·1	**11·8**	11·3	10·6	9·8	9·6	9·7	9·8

APRIL.

1	9·8	9·4	8·7	8·0	7·9	8·1	8·8	10·7	11·7	11·5	10·3	9·5	9·4	9·7	9·9
2	9·2	9·0	8·9	8·6	8·5	8·7	9·6	11·0	12·0	12·0	11·1	9·9	9·6	9·5	9·8
3	9·8	9·7	9·0	8·1	7·6	8·0	9·6	11·0	11·6	10·8	10·0	9·6	9·3	9·4	9·7
4	9·1	8·8	8·1	7·6	8·1	8·7	9·7	11·5	12·5	12·1	11·1	10·3	9·6	9·6	9·6
5	9·3	9·3	8·7	7·9	7·3	8·0	9·4	11·0	11·9	11·8	11·1	10·0	9·2	9·0	9·6
6†	9·6	9·7	8·9	7·7	7·4	7·6	8·2	9·6	10·2	10·3	9·9	9·1	9·0	9·2	9·6
7	9·7	9·6	8·7	8·2	8·5	8·9	10·2	11·3	11·5	11·5	10·7	10·2	9·8	9·7	9·9
8	9·6	9·7	8·7	7·6	7·2	6·9	8·4	10·3	11·6	11·3	10·2	9·5	9·2	9·5	9·8
9	9·2	8·9	8·1	7·9	8·4	9·1	10·2	11·4	11·5	11·2	10·5	9·7	9·4	9·4	9·9
10	9·7	9·3	7·9	7·0	6·9	7·8	9·3	10·5	11·3	11·3	10·9	9·9	9·4	9·0	9·5
11	9·5	8·8	8·0	7·5	7·8	8·5	10·2	11·8	12·4	11·8	11·0	10·0	8·8	8·7	8·7
12†	9·5	8·9	7·9	7·2	7·1	8·3	10·4	12·4	13·0	11·9	10·3	9·2	8·7	8·9	9·6
13†	9·7	9·3	8·4	7·5	7·8	8·7	10·1	11·1	11·5	10·8	10·2	9·3	9·0	9·1	9·5
14†	9·5	8·9	7·9	7·3	7·3	8·3	10·3	12·0	**13·1**	12·8	12·0	10·7	10·0	9·5	9·7
15	9·4	8·9	7·8	6·6	**6·1**	7·3	8·9	11·1	12·2	11·9	10·8	10·0	9·9	10·0	10·1
16	9·8	9·3	8·1	7·1	7·0	7·9	9·5	11·3	12·3	12·2	11·5	10·6	10·2	9·7	10·1
17	9·7	9·5	8·3	7·3	7·2	8·2	9·6	10·7	11·3	10·9	10·2	9·5	9·3	9·3	10·0
18	9·6	9·1	8·3	7·3	7·6	8·5	9·9	11·0	11·5	11·2	10·7	9·9	9·4	9·4	9·4
19	9·3	8·7	7·8	7·6	8·5	9·4	10·7	11·5	11·6	10·9	10·7	10·7	10·5	10·1	10·5
20	9·6	8·9	7·9	7·1	7·4	9·1	10·7	11·8	12·2	11·6	10·7	9·2	9·5	9·5	9·4
21	9·6	9·3	8·4	8·0	7·9	8·7	10·0	11·6	11·9	11·0	10·7	10·4	10·0	9·9	9·9
22	9·6	9·0	7·7	6·9	7·3	8·6	10·1	11·0	11·4	11·3	10·7	10·1	9·2	9·2	9·6
23	9·2	9·0	8·1	7·4	7·2	8·2	9·8	11·1	11·4	11·1	10·3	10·1	9·7	9·5	9·5
24	9·1	8·7	7·5	7·4	8·2	8·9	10·5	11·8	11·8	11·3	10·8	9·9	9·7	10·0	10·0
25	9·5	8·7	7·8	7·5	8·3	9·5	11·0	12·1	12·5	12·2	11·7	11·1	10·7	10·6	10·9
26	9·4	9·2	8·4	8·0	8·1	8·8	9·9	10·4	10·6	10·9	10·5	10·2	9·9	10·0	10·1
27	9·5	8·6	7·6	7·3	7·7	9·1	10·8	11·8	11·9	11·5	10·6	10·0	9·7	9·6	9·8
28	9·7	9·2	8·3	7·7	8·0	8·9	10·3	11·4	11·9	11·5	10·9	10·0	9·7	10·1	10·5
29†	9·8	8·7	7·3	7·3	8·5	9·5	10·8	11·5	12·1	12·0	10·8	9·7	9·4	9·5	9·7
30	9·3	8·3	7·5	7·7	8·9	10·0	11·0	11·5	11·5	11·1	9·9	9·0	9·0	9·6	10·2
Mean .	9·5	9·1	8·2	7·5	7·7	8·5	9·9	11·3	**11·8**	11·5	10·7	9·9	9·5	9·5	9·8
Mean† .	9·6	9·1	8·1	7·3	7·6	8·4	10·0	11·3	**12·0**	11·6	10·6	9·5	9·2	9·2	9·7

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

MARCH. 0° PLUS TABULAR QUANTITIES.

Hours (G. M. T.).									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′	
9·9	9·8	9·8	9·8	9·8	9·8	9·8	9·8	9·9	9·7	3 30	8·1	8 14	11·7	1
9·2	9·3	9·2	9·2	9·2	9·2	9·3	9·4	10·0	9·5	3 10	8·1	8 30	11·3	2
9·6	9·7	9·4	9·2	9·3	9·5	9·5	9·6	9·5	9·8	2 51	8·2	7 30	12·2	3
9·7	9·8	9·6	9·7	9·7	9·7	9·8	9·8	10·0	9·5	3 47	7·7	8 25	10·9	4
9·9	9·7	9·6	9·8	9·9	10·0	10·0	10·0	10·1	9·5	3 32	7·4	7 8	11·0	5
9·7	9·7	9·7	9·7	9·7	9·7	9·8	9·9	9·9	9·7	3 8	8·3	8 2	12·0	6†
10·1	10·0	9·8	9·8	9·9	9·9	10·0	9·8	10·0	9·9	3 6	8·0	7 30	11·9	7
9·8	9·8	9·8	9·6	9·3	9·4	9·5	9·9	10·0	9·9	4 18	8·2	8 6	12·1	8
9·3	9·7	9·7	9·6	9·7	9·8	10·0	9·9	10·0	9·8	3 35	7·7	7 10	12.3	9
9·6	9·5	9·3	9·4	9·8	9·8	9·8	9·9	10·1	9·8	3 54	8·4	7 38	11·9	10
9·9	9·8	9·8	9·9	9·9	10·0	10·0	10·1	10·1	9·8	4 30	8·6	8 32	11·1	11†
10·5	10·3	10·3	10·3	9·6	9·6	10·1	10·7	10·4	10·0	4 0	7·3	7 57	11·4	12
9·7	9·4	9·2	9·9	10·2	9·9	9·4	10·2	10·5	9·5	4 10	7.2	22 46	11·2	13
9·5	9·7	9·5	9·3	9·5	9·6	9·7	9·9	9·9	9·6	3 24	7·9	7 26	11·5	14
9·8	10·0	10·0	10·0	10·0	9·9	9·9	10·0	10·1	9·6	4 57	7·6	7 42	11·1	15
10·1	10·1	10·1	9·9	9·8	9·8	9·8	9·9	10·1	9·9	3 50	7·7	7 10	11·9	16
9·9	9·8	9·9	9·9	9·8	9·8	10·0	10·1	10·4	10·0	4 28	**6·3**	9 4	12·9	17
10·1	9·9	9·9	9·9	9·8	9·8	9·9	10·2	10·3	10·0	4 12	7·3	8 8	12·3	18†
10·1	10·1	10·0	10·0	9·9	10·0	10·0	10·6	10·3	**10·3**	3 54	8·0	8 36	**13·4**	19†
10.2	10·0	10·1	10·2	10·2	10·1	10·0	9·8	9·6	9·7	4 33	6·4	5 24	11·3	20
9·6	9·9	9·7	9·4	9·3	9·4	9·7	9·9	9·9	9·6	4 55	7·1	8 14	12·5	21
10·2	9·9	9·9	9·9	9·8	9·7	9·8	9·5	9·5	9·6	4 30	7·1	7 32	11·9	22
9·6	9·7	9·5	9·4	9·3	9·2	9·2	9·2	9·3	9·7	4 1	8·3	7 44	12·2	23
9·8	9·7	9·6	9·4	9·3	9·4	9·4	9·6	9·6	9·9	2 35	8·1	7 54	12·2	24
9·9	9·8	9·7	9·5	9·6	9·2	9·1	9·4	9·8	9·4	3 52	6·9	7 52	11.5	25
9·8	9·7	9·7	9·7	9·6	9·7	9·7	9·6	9·5	9·6	3 54	8·1	8 30	11·3	26
10·1	9·9	9·9	9·8	9·5	9·5	9·5	9·5	9·4	9·8	4 38	7·9	8 38	12·2	27
9·8	9·8	9·7	9·7	9·7	9·7	9·5	9·5	9·4	**9·3**	4 30	7·0	7 48	11·4	28
10·0	9·6	9·6	9·5	9·5	9·4	9·4	9·5	9·7	9·5	4 52	7·8	8 40	11·7	29
9·7	9·9	9·9	9·8	9·7	9·7	9·7	9·9	9·9	9·6	5 6	7·9	7 56	11·6	30†
9·9	9·8	9·5	9·6	9·6	9·6	9·6	9·8	9·9	9·6	3 47	6·8	8 14	12·0	31
9·8	9·8	9·7	9·7	9·7	9·7	9 7	9·8	9·9	9·7					Mean.
9·9	9·9	9·9	9·9	9·8	9·8	9·9	10·0	10·1	9·9					Mean†.

APRIL.

9·7	9·6	9·4	9.2	8·7	9·1	9·3	9·4	9·4	9·5	3 46	7·8	8 29	11.9	1
9·9	10.0	10·0	9·9	9·8	9·5	9·7	9·8	9·8	9·8	3 44	8·0	8 44	12·5	2
9·5	8·8	8·5	8·5	8·1	8·1	8·6	8·8	9·1	**9·2**	3 55	7·5	7 56	11·8	3
9·6	9·6	9.4	9·1	8·8	9·1	9·1	8·9	9·0	9·5	2 44	7·4	8 14	12·8	4
9·7	9·7	9·5	9·4	9·5	9·5	9·5	9·3	9·4	9·5	4 5	7·1	8 8	12·8	5
9·7	9·8	9·8	9·8	9·7	9·6	9·6	9·6	9·6	9·3	4 20	7·0	8 16	12·4	6†
10·1	9·9	9 9	9·7	9·6	9·4	9·4	9·4	9·5	9·8	3 51	7·0	8 36	11·8	7
10·1	9·8	9.7	9·8	9 8	9·6	9·5	9·3	9·2	9·4	5 20	6·4	7 47	11·8	8
9·9	9·9	9·9	9.9	9·7	9 6	9·5	9·0	9.8	9·7	4 53	6·6	7 30	11·8	9
9·7	9·7	9·7	9·6	9·5	9·5	9·0	9·6	9·7	9·4	3 3	6·5	8 43	11.7	10
8·9	9·5	9·6	9·6	9·5	9·5	9·5	9·5	9·6	9·5	3 23	7·3	7 51	12·7	11
9·7	9·7	9·7	9·6	9·6	9·6	9·7	9·8	9·9	9·6	3 51	6·8	8 6	13·3	12†
9·7	9·7	9·7	9·7	9·7	9·7	9·6	9·7	9·7	9·6	3 25	7·4	7 47	11·8	13†
9·8	9·7	9·7	9·7	9·6	9·5	9·4	9·5	9·6	9·8	2 45	6·7	8 27	**13·5**	14†
10·0	9·9	9·9	9·8	9·5	9·5	9·5	9·6	9·8	9·6	4 2	**5·7**	8 6	12·3	15
10·2	10·1	10.0	10·0	9·7	9·7	9·7	9·7	9·7	9·8	3 46	6.7	8 2	12·5	16
10·2	10·3	10 2	10·2	10 1	9·9	9·8	9·9	9·9	9·6	3 51	6·9	7 54	11·5	17
9·4	9·5	9·6	9·7	9·6	9·5	9·5	9·3	9·4	9·5	3 32	6·8	7 51	11·7	18
10·7	9·9	9·5	8·9	8·9	8·9	8·5	8·5	8·9	9·6	2 33	7·3	7 42	12·0	19
9·6	10·0	10·0	9·9	9·9	9·7	9.6	9·5	9·6	9·7	3 22	6·6	7 38	12·4	20
10·0	9·9	9·8	9·8	9·7	9·4	9·3	9·3	9·6	9·8	3 37	7·5	7 34	12·4	21
10.0	10·1	9·6	9·3	9·3	9·3	9·3	9·3	9·3	9·5	2 58	6·7	8 4	11·7	22
9·7	9·6	9 5	9·5	9·5	9·5	9·5	9·5	9·4	9·5	3 52	6·8	8 0	11·8	23
10·0	10 0	9·9	9·9	9·9	9·9	9·7	9·6	9·6	9·8	2 34	7·3	7 40	12·2	24
11.0	10·3	9·9	9·5	9·4	9·3	9·2	9·1	9·2	**10.0**	2 42	7·3	8 5	12·9	25
10·1	10·1	10·1	10·0	9·9	9·8	9·8	9·7	9·7	9·7	3 34	7·7	9 8	11·2	26
9·8	9·9	9 9	9·9	9 7	9·6	9·6	9·7	9·8	9·7	2 52	7·1	8 2	12·2	27
10·3	10·4	10·3	10·0	9·9	9·9	9·8	9·8	9·9	9·9	3 30	7·3	7 39	12·1	28
9·8	9·7	9·7	9·7	9·7	9·6	9·5	9·5	9·5	9·7	3 30	7.1	8 24	12·4	29†
10·3	10·2	10·1	9·9	9·8	10·0	10·0	9·9	9·8	9·8	2 23	7.2	7 34	11·8	30
9·9	9·9	9·7	9·7	9·5	9·5	9·5	9·5	9·5	9·6					Mean.
9·7	9·7	9 7	9·7	9·7	9·6	9·6	9·7	9·7	9·6					Mean†.

*See footnote on page 89.

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

MAY. 0° PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.).														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	9·5	8·7	7·8	7·9	8·9	10·8	12·0	12·4	12·5	11·9	10·9	9·9	9·5	9·9	10·3
2	9·6	8·9	7·8	7·4	8·1	9·6	11·3	12·5	13·0	12·2	11·1	9·7	9·2	9·7	10·2
3	9·9	9·3	7·9	7·1	7·1	8·5	9·9	11·2	11·3	10·7	9·8	9·1	8·7	9·3	10·3
4	9·1	8·7	7·4	7·6	8·7	9·9	11·4	12·1	12·0	11·2	10·5	9·3	9·2	9·9	10·2
5	9·5	8·9	8·0	7·9	8·4	9·5	10·9	11·7	12·1	11·7	11·6	10·9	10·2	10·1	10·3
6	9·5	8·8	8·2	8·6	9·9	11·4	13·2	13·8	13·2	12·1	10·7	9·6	9·3	10·0	10·4
7	9·8	9·1	8·7	9·1	9·4	10·7	11·3	11·0	10·7	10·3	10·3	9·5	9·1	10·0	10·0
8	9·6	9·1	8·3	8·3	8·9	10·3	11·3	12·1	12·3	11·8	10·6	9·9	9·7	10·0	10·2
9†	9·9	9·3	8·9	9·0	9·8	11.4	12·9	13·1	12·8	11·4	10·1	9·7	9·5	9·7	10·3
10†	10·0	9·7	8·7	8·0	8·9	10·3	12·3	13·0	12·7	11·7	10·8	10·0	9·8	9·9	10·0
11	9·9	9·3	8·5	8.0	8·8	11·1	12·9	13·6	13·8	13·1	11·9	10·9	10·7	11·0	10·7
12	9·1	8·3	7·1	7·6	8·9	10·6	11·3	12·1	12·5	11·7	10·8	10.0	9·8	9·9	10·1
13	9·3	8·6	7·9	7·9	8·5	9·1	10·4	11·6	11·9	11·6	11·1	10·7	10·1	10·2	10·4
14	9·5	8·3	7·4	7·9	9·0	10·6	12·2	13·2	13·5	13·0	11·9	11·2	10·6	10·4	10·7
15	8·9	7·7	6·6	6·5	8·0	9·5	11·0	11·3	10·9	10·1	9.9	9·8	9·3	9·3	9·5
16	8·9	9·0	7·1	7·6	8·5	9·4	10·7	11·5	11·0	10·7	9·9	9·4	9·1	9·7	9·9
17	9·5	8·5	7·7	7·9	8·7	10·5	11·7	12·0	12·5	11·8	10·5	9·3	8·9	9·6	10·5
18	9·4	8·7	8·0	8·3	9·0	10.5	11·2	12·0	11·9	11·0	9·4	9·5	8·8	9·5	10·0
19	8·7	7·7	7·7	7·9	9·0	10·9	12·0	12·5	12·2	11·4	10·8	9·7	9·4	9·5	9·9
20	9·3	8·2	7·2	7.0	7·4	9·1	11·0	12·4	12·1	11·7	11.3	10·8	10·4	9·6	9·8
21	9·3	8·6	7·7	7·7	8·1	9·7	10·8	11·3	11·3	10·7	10·2	9·7	9·3	9·6	10·0
22†	9·5	8·8	7·9	7·4	7·7	9·5	11·5	12·7	12·7	11·9	11·3	10·7	10.3	10·0	10·0
23†	9·7	8·7	7·7	7·4	8·4	10·3	12·4	12·7	12·7	12·0	11·4	10·7	10·5	10·5	10·9
24	10·5	9·9	9·2	8·5	8·8	10.3	11·7	12·8	13·2	13·3	12·2	10·8	10·4	10·5	11·0
25	10·4	9·3	8·1	7·7	8·9	10·7	12·2	12·8	12·7	11·6	10·6	10·5	10·5	10·7	11·2
26	9·5	8·4	7·8	8·3	9·1	12·4	13·7	13·9	12·8	12·1	10·6	9·1	9·6	10·4	10·8
27	9·7	8·6	7·5	7·5	8·7	10·2	10.9	11·8	12·1	11·5	11·3	10·5	10·1	10·1	10·7
28†	10·1	9·4	8·5	8·3	9·0	10·5	12·2	12·9	12·9	12·5	11·5	10·6	10·1	10·1	10·6
29	10·3	9·3	8·1	7·5	8·1	9·5	11·3	12·7	13·7	13·4	12·5	11·5	10·7	10·4	10·3
30	9·8	8·7	7·9	8·0	9·1	10·3	11·2	12·4	13·1	12·4	11·4	10·6	10·1	10·4	10·9
31	10·2	9·1	8·3	7·7	8·3	10·3	11·6	13·3	14·0	13·4	13·1	12·3	10·9	10·3	10·5
Mean . .	9.6	8·8	7·9	7·9	8·7	10·2	11·6	12·4	12·5	11·8	11·0	10·2	9·8	10·0	10·3
Mean† . .	10.0	9·3	8·4	8·1	8·8	10·5	12·4	13·0	12·8	11·9	11·0	10·3	10·0	10·0	10·4

JUNE.

1	10·1	9·2	8·0	7·3	7·8	10·0	11·6	13·3	13·4	12·7	12·3	11·4	10·3	10·2	10·7
2	9·4	8·8	7·2	6·4	7·3	9·5	12·2	13·4	14·0	13·9	13·4	13·2	11·9	11·0	11·3
3	9·7	9·1	7·8	7·2	7·4	8·6	10·4	12·3	12·7	12·4	11·7	11·0	10·4	10·3	10·4
4	10·1	9·3	8·3	8·3	8·9	10·1	10·6	11·3	11·7	11·3	11·3	10·8	10·1	9·9	10·2
5†	9·8	9·0	8·7	9·2	10·2	11·6	13·1	14·2	14·2	13·7	13·2	11·8	11·0	10·4	11·0
6	10·2	9·2	8·2	7·6	7·9	8·6	10·2	12·7	13·3	12·3	11·9	11·2	10·6	10·2	10·2
7	9·8	9·2	8·8	8·8	9·2	10·4	12·1	13·1	13·4	12·6	12·0	11·2	10·4	10·2	10·3
8	10·1	8·9	7·4	7·1	7·8	8·9	10·2	11·3	12·3	12·4	12·1	11·3	11·0	10·6	10·5
9	10·6	10·1	8·6	7·7	8·6	10·0	11·1	11·1	11·1	10·9	10·9	10·9	10·3	10·2	10·2
10	9·3	8·3	7·9	8·1	8·4	9·4	10·2	11·0	11·6	12·0	11·7	11·2	10·8	10·8	11·1
11	9·7	8·7	7·8	8·1	9·3	10·6	12·1	13·0	13·0	12·3	12·1	11·6	11·0	10·7	10·7
12	9·1	8·8	8·2	8·2	9·1	9·8	10·9	11·9	12·4	12·1	11·1	10·1	9·6	9·9	10·1
13	9·0	8·1	7·6	7·6	7·9	10·3	11·4	11·9	12·0	11·1	10·9	10·5	10·4	10·6	11·1
14	9·8	8·6	8·2	8·3	9·1	10·2	10·9	11·6	11·8	11·2	10·6	10·0	9·5	9·5	10·6
15†	9·3	8·6	7·6	7·4	8·0	9·3	10·9	12·1	12·1	11·1	10·3	10·1	9·9	10·1	10·4
16†	10·0	9·1	8·2	8·2	8·3	8·7	10·0	11·1	12·2	12·2	12·1	11·7	11·1	10·8	10·8
17†	9·7	9·2	9·1	9·1	10·0	10·9	11·5	12·0	12·2	12·3	12·9	12·4	11·9	11·1	11·2
18	10·1	9·3	8·7	8·7	8·9	10·0	11·1	12·1	12·7	12·5	11·9	11·5	11·3	10·9	10·5
19	10·0	9·3	8·3	8·3	9·3	11·1	11·9	12·4	12·9	12·1	12·1	12·1	11·9	11·3	11·1
20	10·2	9·3	8·3	8·3	9·3	10·4	12·0	12·5	12·8	12·4	12·1	11·9	11·2	10·9	10·8
21	10·4	9·7	8·8	8·1	8·6	9·4	10·2	11·3	12·3	12·3	12·1	11·5	11·2	11·2	11·2
22	10·2	9·6	9·0	8·1	8·0	9·3	11·6	12·4	12·6	12·5	11·8	11·0	10·5	10·6	11·3
23	10·2	10·0	9·1	8·5	8·4	9·0	10·4	11·3	12·0	12·3	12·6	12·5	11·7	11·4	11·3
24	10·4	10·1	9·4	9·1	9·7	10·9	12·1	13·7	14·5	14·0	12·7	11·7	11·2	11·2	11·2
25†	10·3	9·9	9·5	9·5	9·9	11·0	12·1	12·8	13·3	13·1	13·0	12·2	11·5	11·4	11·4
26	10·4	9·7	9·0	8·5	8·9	10·0	11·5	12·2	12·3	12·2	12·2	11·9	11·5	10·9	10·9
27	10·4	9·5	8·2	8·4	9·7	11·4	13·1	14·1	14·3	13·6	12·7	12·1	11·3	11·3	11·5
28	10·4	9·3	8·3	8·2	9·0	10·5	12·4	12·9	13·4	13·5	12·8	11·9	11·2	11·2	11·0
29	10·3	9·2	8·8	9·5	10·7	11·6	12·4	13·1	13·7	13·5	12·5	11·5	10·6	10·5	11·0
30	10·2	9·1	8·6	10·0	11·6	12·6	14·1	15·3	14·7	13·3	12·2	11·0	10·3	10·3	10·7
Mean .	10·0	9·2	8·4	8·3	8·9	10·1	11·5	12·5	12·8	12·5	12·0	11·5	10·9	10·7	10·8
Mean† .	10·0	9·3	8·7	8·8	9·3	10·4	11·6	12·5	12·9	12·5	12·3	11·7	11·1	10·7	10·9

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

MAY. 0° PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′	
10·6	10·5	10·3	10·2	10·1	10·0	9·9	9·9	9·7	10·2	2 24	7·4	7 52	12·7	1
10·3	10·3	10·2	10·1	10·0	9·9	9·8	9·8	9·8	10·0	2 54	7·3	7 55	13·5	2
10·3	10·2	9·9	9·7	**9·5**	9·4	9·3	9·4	9·3	**9·4**	3 42	**6·7**	7 33	11·9	3
10·2	10·1	10·1	10·0	9·8	9·7	9·6	9·7	9·7	9·9	2 28	7·2	7 48	12·6	4
10·7	10·5	10.2	10·0	9·8	9·7	9·6	9·6	9·7	10·1	2 37	7·7	7 56	12·7	5
10·7	10·4	10·1	10·1	9·9	10·0	9·9	9·8	9·9	10·4	2 11	8·0	6 46	14·1	6
9·5	9·8	9·8	9·8	9·6	9·7	9·8	9·6	9·5	9·8	2 14	8·3	5 34	11·9	7
10·2	10·2	10·2	10·1	10·1	10·1	10·1	10·1	10·1	10·1	2 33	8·1	7 50	12·8	8
10·3	10·3	10·3	10·1	10·1	10·1	10·1	10·3	10·3	10·4	2 8	8·6	6 54	13·5	9†
10·2	10·3	10·2	10·2	10·2	10·2	10·1	10·0	10·0	10·3	2 58	7·9	7 24	13·1	10†
10·8	10·6	10·0	9·9	9·7	9·3	9·1	9·2	9·5	10·5	3 2	7·9	7 38	14·1	11
10·1	10·1	9.8	9·8	9·8	9·8	9·7	9·8	9·8	9·9	2 35	6·8	7 53	12·9	12
10·3	10·2	10·1	9·9	9·8	9·1	9·6	9·8	9·7	9·9	2 30	7·8	8 27	12·1	13
10·7	10·5	10·2	9·8	9·7	9·2	9·1	9·8	9·1	10·3	2 8	7·2	8 12	13·9	14
10·1	10·2	10·0	9·8	9·7	9·6	9·5	9·3	9·2	9·4	2 39	**6·1**	7 18	11·7	15
9·9	9·9	9·8	9·8	9·7	9·8	9·9	9·7	9·7	9·6	1 57	7·0	7 0	11·8	16
10·5	10·4	9·8	9·7	9·6	9·8	9·7	9·6	9·5	9·9	2 40	7·6	7 51	12·8	17
10·0	10·0	10·0	9·7	9·7	9·5	9·5	9·2	9·0	9·7	2 30	7·7	7 22	12·7	18
10·0	10·1	9·9	9·7	9·7	9·7	9·5	9·5	9·5	9·9	1 22	7·5	6 43	12·8	19
10·0	10·1	9·9	9·7	9·6	9·4	9·4	9·0	9·3	9·7	3 4	6·8	7 30	12·7	20
10·1	10·1	10·1	9·7	9·5	9·5	9·5	9·5	9·6	9·7	2 30	7·6	8 5	11·7	21
10·1	10·1	10·3	10·3	10·2	10·3	10·3	9·8	9·9	10·1	3 12	7·0	7 22	13·3	22†
10·9	10·8	10·8	10·7	10·6	10·7	10·6	10·6	10·6	10·5	3 9	7·0	7 20	13·3	23†
11·0	10·7	10·7	10·6	10·6	10·5	10·4	10·5	10·5	**10·8**	3 25	8·4	8 45	13·6	24
11·0	10·9	10·5	10·5	10·5	10·5	10·5	10·4	10·2	10·5	2 30	7·5	7 19	13·2	25
10·5	10·5	10·5	10·5	10·5	10·4	10·4	10·4	10·4	10·5	2 12	7·6	6 34	**14·6**	26
10·7	10·6	10·4	10·1	10·1	10·1	10·1	10·1	10·1	10·2	2 36	7·3	7 51	12·5	27
10·6	10·6	10·5	10·4	10·3	10·3	10·3	10·4	10·4	10·5	2 54	7·9	7 40	13·5	28†
10·4	10·5	10·6	10·5	10·1	9·0	9·9	10·0	10·0	10·4	2 58	7·3	8 16	14·0	29
10·7	10·7	10·5	10.4	10·4	10·4	10·4	10·4	10·4	10·5	2 38	7·6	7 38	13·4	30
10·8	10·8	10·5	10·4	10·3	10·1	10·1	10·1	10·2	10·7	2 52	7·5	7 54	14.3	31
10·4	10·3	10·2	10·1	10·0	9·9	9·9	9·9	9·8	10·1					Mean
10·4	10·4	10·4	10·3	10·2	10·2	10·2	10·1	10·1	10·4					Mean†

JUNE.

10·9	11·3	11·3	10·6	10·3	10·1	10·0	9·9	9·1	10·5	3 21	7·1	7 36	13·9	1
11·0	10·7	10·1	9·5	9·9	9·9	9.7	9·6	9·9	10·6	3 18	**6·1**	8 30	14·4	2
10·6	10·6	10·4	10·4	10·4	10·2	10·2	10·2	10·2	10·2	3 2	7·1	8 16	13·1	3
10·3	10·5	10·3	10·2	10·2	10·1	10·1	10·3	10·2	10·2	2 34	8·2	8 4	12·0	4
10·8	10·8	10·6	10·5	10·3	10·3	10·2	10·2	10·3	11·1	2 12	8·5	7 34	14·5	5†
10·4	10·4	10·2	10·0	9·9	9·6	9·5	9·7	9·9	10·2	2 54	7·3	7 43	13·8	6
10·3	10·3	10·3	10·2	10·1	10·0	10·0	10·1	10·2	10·5	2 17	8·4	7 54	13·8	7
10·5	10 7	10·6	10·3	9·9	9·7	10·0	10·1	10·7	10·2	2 56	7·0	8 40	12·9	8
10·4	10·2	10·1	9·8	9·5	9·5	9·3	9·3	9·3	10·0	3 27	7·3	5 46	11·4	9
11·2	11·2	10·8	10·1	9·8	9·6	9·4	9·6	9·8	10·1	2 6	7·4	9 11	12·2	10
10·5	10·7	10·5	10·4	10·2	10·0	9.7	9·7	9·2	10·5	2 30	7·4	7 37	13·5	11
10·6	10·1	9·9	9·8	9·6	9·4	9·3	9·1	9·3	**9·9**	1 54	8·0	8 18	13·0	12
10·7	10·9	10·7	10·3	10·1	10·1	10·1	9·9	9·8	10·1	2 30	7·2	7 47	12·3	13
10·8	10·6	10·3	10·2	10·2	10·1	10·0	9·9	9·8	10·1	2 32	8·1	7 44	12·2	14
10·8	10·8	9·9	10·1	10·1	10·1	10·1	10·0	10·1	10·0	2 54	7·1	7 34	12·3	15†
10·7	10·6	10·5	10·5	10·2	10·1	10·0	9·7	9·7	10·3	2 42	8·1	9 30	12·7	16†
11·1	11·1	10·9	10·5	10·2	10·1	10·1	10·1	10·1	10·8	1 58	8·7	10 30	13·2	17†
10·6	10·6	10·4	10·3	10·1	10·1	10·1	10·2	10·2	10·5	3 20	8·3	8 8	13·0	18
11·1	11·1	11·1	10·9	10·7	10·4	10·2	10·3	10·3	10·9	2 34	8·0	7 38	13·2	19
10·8	10·6	10·7	10·6	10·5	10·4	10·3	10·4	10·4	10·7	2 42	8·0	8 24	12·9	20
11·3	11·9	11·2	11·1	10·9	10·1	10·1	10·1	10·3	10·6	3 2	**7·8**	8 34	12·8	21
11·3	11.1	10·9	10·6	10·4	10·2	10·1	9·9	10·2	10·5	3 30	7·9	7 59	12·9	22
11·2	11·2	10·9	10·9	10·8	10·9	10·9	10·5	10.5	10·8	3 46	8·1	10 26	13·1	23
11·1	11·1	11·1	10·9	10·6	10.3	10·2	10·3	10·3	11.2	2 48	9·0	8 13	14·8	24
11·4	11·4	11·3	11·3	10·9	10.6	10·5	10·5	10·4	11·2	2 47	9·3	8 28	13·6	25†
11·8	12·3	12·0	11·7	11·3	11·0	11·0	10·7	10·3	11·0	3 9	8·2	15 26	12·8	26
11·4	11·0	10·6	10·9	10·7	10·7	10·5	10·4	10·3	11.2	2 6	7·5	8 0	14·7	27
11·0	11·1	11·3	10·9	10·8	10·5	10·5	10·4	10·5	11·0	3 0	7·9	8 20	14·2	28
11·3	11·2	11·0	11·0	10·7	10·6	10·5	10·5	10·4	11·1	1 30	8·5	8 30	14·3	29
11·0	11·0	10·9	10·9	10·9	10·6	10·5	10·3	10·3	**11·3**	1 34	8·5	7 20	**15·8**	30
10·9	10·9	10·7	10·5	10·3	10·2	10·1	10·1	10·1	10·6					Mean
10·9	10·9	10·6	10·5	10·3	10·2	10·1	10·1	10·0	10·7					Mean†

*See footnote on page 89.
†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

JULY. 0° PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.).														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	10·2	9·3	8·5	8·7	9·6	10·3	11·5	12·6	13·0	12·7	11·8	11·1	10·6	10·4	10·6
2	10·3	9·4	8·6	8·7	10·2	11·4	13·2	13·7	13·6	13·3	12·5	11·6	11·0	11·3	11·5
3	10·0	9·1	8·4	8·9	10·4	11·6	12·6	13·3	13·3	13·3	12·7	12·1	11·4	11·1	11·3
4	10·2	9·2	7·8	7·5	8·1	9·9	11·3	12·5	12·7	12·7	12·6	11·9	11·0	11·0	11·2
5	10·2	9·6	9·0	9·2	9·9	10·9	12·5	14·2	14·3	14·3	13·5	12·9	12·1	11·3	11·2
6	10·6	9·9	8·8	8·3	8·5	9·9	12·3	13·6	13·9	13·2	12·4	12·1	11·2	10·9	11·1
7	10 6	9·9	8·5	8·1	9·7	11·6	13·7	14·9	15·2	15·0	14·4	13·2	12·1	11·4	11·2
8	10·1	9·6	8·7	9 3	10·9	12·5	13·2	14·0	13·7	13·4	12·9	12·2	11·2	10·9	11·1
9†	10·1	9·3	9·3	10·3	11·6	12·8	13·6	13·7	14·1	14·5	13·7	12·7	11·9	11·0	11·2
10†	10·1	9·4	8·7	8·9	9·3	10·4	11·7	12·4	12·3	11·6	11·5	11·1	10·7	10·7	11·1
11	9·9	9·5	9·2	9·8	10·3	11·3	12·6	14·2	14·5	13·9	12·3	11·5	11·5	11·3	11·6
12	9·1	8·6	7·7	8·2	9·0	10·7	12·2	13·4	14·0	14·2	14·0	12·7	11·7	11·0	10·7
13	10·4	9·7	9·2	9·8	10·7	11·5	12·3	12·8	12·8	12·8	12·5	11·7	11·1	11·2	11·5
14	10·6	9·7	9·1	8·9	9·6	10·8	12·4	13·4	13·6	12·7	11·5	10·3	10·4	11·1	11·3
15	10·3	9·6	9·0	9·1	9·6	10·3	11·6	12·5	12·3	12·1	12·2	11·6	11·0	10·3	10·7
16	10·5	9·7	9·5	9·4	9·9	11·0	12·2	12·5	12·9	12·8	12·2	11·5	10·7	10·7	11·2
17	10·8	10·4	9·9	9·6	10·0	10·7	11·2	11·6	11.8	12·1	12·1	11·2	10·6	10·5	11·0
18	11·0	10·3	9·7	9·6	10·4	11·3	11·9	12·7	13·5	13·2	12·7	11·9	11·4	11·2	11·2
19†	10·7	10·2	9·0	8·2	9·2	10·8	12·1	12·7	12·8	13·1	13·0	12·5	11·3	10·8	11·1
20†	10·8	10·2	9·3	9·0	9·8	11·3	13·0	13·7	13·8	13·6	12·6	12·3	11·6	11·1	11·3
21†	10·5	9·8	8·7	7·9	9·4	11·4	12·1	12·4	12·8	12·9	11·9	10·9	10·5	10·7	11 0
22	10·5	9·8	9·3	8·7	9·7	10·7	12·2	12·1	12·1	12·4	12·3	11·4	10·8	10·9	11·3
23	10·5	9 8	9·0	8·5	8·9	10·9	12·9	13·7	13·8	13·3	12·2	11·1	10·9	11·4	11·7
24	10·0	9·3	8·7	8·7	9·2	9·7	11·0	11·8	12·3	12·3	11·3	10·8	10·7	10·6	10·7
25	10·2	9·3	8·9	9·4	10·1	10·8	12·3	13·4	13·6	12·8	11·9	11·6	11·4	10·7	10·5
26	10·5	9 6	9·4	9·0	9·6	10·7	11·7	11·9	12·1	12·4	12·3	11·7	11·9	11·1	10·6
27	10·5	9·9	9·4	9·3	9·4	10·4	12·2	13·2	12·6	11·7	11·6	11·8	11·6	11·1	10·8
28	10·4	9·7	9·1	9·3	9·8	11·1	13·4	14·4	14·0	13·2	12·3	12·1	11·9	11·4	11·5
29	9·9	9·5	8·6	8·5	8·9	9·6	10·1	10·9	11·7	12·2	12·4	12·1	11·5	11·4	11·3
30	9·5	9·1	8·8	8·5	8·8	9·7	10·7	11·4	11·8	11·5	11·1	11·1	11·0	10·9	11·1
31	10·0	9·4	8·8	8·2	8·9	10·1	12·2	12·6	13·2	13·1	12·3	11·2	10·5	10·4	10·8
Mean .	10·3	9·6	8·9	8·9	9·7	10·8	12·2	13·0	13·2	13·0	12·4	11·7	11·2	11·0	11·1
Mean† .	10·4	9·8	8·9	8·8	9·8	11·3	12·5	13·0	13·1	13·2	12·5	11·9	11·1	10·8	11·1

AUGUST.

1	10·4	9·8	9·4	9·5	10·1	10·7	11·1	11·4	12·3	13·1	13·1	12·0	11·1	10·8	11·1
2†	10·0	9·1	8·2	8·5	10·1	11·7	13·1	13·7	13·8	13·3	12·5	11·6	11·0	10·6	10·7
3	10·5	9·8	9·3	9·4	10·0	10·5	11·0	11·7	12·1	11·9	12·1	11·5	11·1	11·0	11 2
4	9·8	9·5	8·7	8·5	9·2	10·9	12·3	12·5	12·7	12·5	12·3	11·5	11·3	11·4	11·3
5	10·4	10·1	9.2	9·6	10·8	11·7	11·7	11·4	12·2	12·9	12·8	12·5	12·2	11·8	11·5
6	10·0	9·6	9·3	8·9	9·2	10·5	11·5	12·4	12·7	12·5	11·6	10·6	10·4	11·1	11·4
7	10·2	9·5	9·0	9·1	10·3	11·6	12·4	12·6	12·5	12·5	12·2	12·1	11·9	11·7	11·2
8	9·5	9·2	9·2	9·3	9·5	10·3	11·0	11·1	11·0	11·2	11·3	10·4	10·0	10·2	10·6
9	10·5	10·3	10·1	10·3	11·0	11·7	12·2	11·3	11·4	11·9	11·7	11·7	11·2	11·1	10·7
10	10·0	9·5	9·5	9·9	10·4	11·0	11·3	12·2	12·3	11·6	10·4	10·0	10·0	10·1	10·8
11	10·5	10·2	9·5	9·5	10·0	10·5	11·1	11·3	10·8	10·3	10·2	10·3	10·9	11·1	11·3
12†	10·4	10·1	9·9	10·1	11·1	12·1	12·6	12·4	12·3	12·3	12·1	11·3	10·4	11·0	11·2
13	10·9	9·9	9·0	9·1	10·3	11·5	12·7	13·3	13·0	12·1	11·2	10·4	10·4	10·7	11·0
14	10·7	10·0	9·0	8·6	9·5	10·6	12·3	13·9	13·9	13·3	12·3	11·5	10·5	10·5	11·1
15	11·0	10·2	9·0	8·7	9·9	11·7	13·5	14·1	14·3	1 ·1	12·6	11·4	10·5	10·5	10·9
16	9·9	9·5	8·8	8·7	9·9	11·0	11·9	13·0	13·0	13·2	12·9	12·2	10·7	10·7	11·8
17†	10·2	8·9	7·8	7·9	9·1	11·2	12·1	12·8	13·2	12·9	12·3	11·2	10·0	9·9	10·6
18†	10·5	9·8	8·8	8·1	8·5	9·7	11·6	12·8	13·3	13·2	12·7	11·7	10·8	10·3	10·3
19	10·9	10·2	9·2	9·0	9·5	10·4	11·3	12·5	12·7	12·7	12·2	11·4	11·1	10·9	10·8
20	10·3	10·2	9·4	8·8	8·7	9·8	11·0	11·9	12·9	12·2	11·2	10 2	9·9	10·8	10·3
21	10·3	9·9	9·2	9·6	10·4	11·2	11·9	12·0	12·0	12·6	12·4	11·6	10·6	10·6	9·9
22	10·3	10·1	9·4	9·8	10·5	10·9	10·9	11·1	10·9	10·8	10·5	10·2	10·5	11·0	11·1
23	10·9	10·2	9·1	8·8	9·5	11·4	12·9	13·6	13·3	12·6	11·6	10·6	10·1	10·1	10·3
24	10·6	10·4	9·5	9·0	10·1	12·2	13·7	14·0	13·3	13·2	12·7	11·8	11·6	12·1	12·0
25	9·3	9·1	7·9	7·3	8·9	11·0	12·8	12·4	12·2	12·1	11·4	10·5	9·9	10·3	11·3
26	9·8	8·9	8·3	8·9	10·5	12·4	14·4	15·1	15·0	14·4	12·9	1·1	9·9	10·3	11·1
27	9·9	8·6	7·6	7·6	9·1	11·0	12·3	13·2	13·3	12·5	11·9	11·2	11·2	11·3	11·1
28	10·2	9·3	8·2	8·0	9·4	10·8	12·5	13·9	14·3	13·7	12·7	11·2	10·1	10·1	10·9
29	10·3	9·4	7·9	7·1	8·0	9·9	11·6	12·4	13·9	13·3	12·3	11·1	10·4	10·6	10·9
30†	10·5	9·9	9·0	9·1	10·5	12·2	12·9	12·6	13·3	13·1	12·2	11·0	10·3	10·3	10·9
31	10·2	9·1	7·5	7·3	8·5	10·3	12·0	13·0	13·5	13·3	12·8	12·0	11·1	10·9	11·2
Mean .	10·3	9·7	8·9	8·8	9·7	11·0	12·1	12·6	12·8	12·6	12·0	11·2	10·7	10·8	11·0
Mean† .	10·5	9·7	8·8	8·8	9·9	11·5	12·5	12·9	13·2	13·0	12·4	11·4	10·5	10·4	10·7

† Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

JULY. 0° PLUS TABULAR QUANTITIES

Hours (G. M. T.).									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′	
11·1	11·2	11·2	11·1	10·9	10·7	10·6	10·6	10·6	10·8	2 8	8·4	7 39	13·2	1
11·6	11·4	11·1	10·7	10·4	10·3	10·1	9·9	10·1	11·1	2 30	8·3	6 48	14·3	2
11·3	11·4	11·1	10·7	10·6	10·5	10·4	10·3	10·3	11·1	2 23	8·1	7 28	13·5	3
11·2	11·1	10·7	10·6	10·4	10·4	10·4	10·0	10·0	10·6	2 57	**7·2**	7 18	13·1	4
11·2	11·2	11·1	11·1	11·0	10·7	10·5	10·6	10·6	11·4	2 20	8·6	8 30	14·6	5
11·4	11·3	11·1	10·5	10·3	10·3	10·3	10·6	10·7	11·0	3 6	8·1	7 46	14·2	6
11·2	11·2	11·1	10·8	10·5	10·3	10·2	10·1	10·2	11·4	2 54	7·6	7 43	**15·5**	7
11·1	11·0	10·8	**10·7**	10·4	10·4	10·3	10·2	10·2	11·2	2 23	8·4	7 20	14·5	8
11·4	11·3	11·2	10·9	10·8	10·4	10·4	10·3	10·1	**11·5**	1 30	9·2	8 50	14·9	9†
11·3	11·3	11·2	11·1	10·9	10·7	10·5	10·4	10·3	10·8	2 22	8·4	7 20	12·5	10†
11·7	11·7	11·2	11·0	10·3	9·5	9·1	8·3	9·2	11·1	2 8	8·8	7 50	14·7	11
10·9	11·2	11·3	11·2	11·1	11·0	10·7	10·6	10·5	11·1	1 50	7·3	9 30	14·5	12
11·6	11·7	11·4	11·2	11·0	11·0	10·6	10·7	10·7	11·1	2 36	8·8	8 43	13·1	13
11·6	11·5	11·1	10·8	11·0	10·8	10·7	10·6	10·5	11·0	2 50	8·5	7 48	13·9	14
11·4	11·4	11·3	11·1	10·9	10·7	10·6	10·7	10·7	10·9	2 54	8·7	7 13	12·7	15
11·2	11·1	11·1	11·1	10·8	10·7	10·7	10·7	10·8	11·1	3 13	9·3	8 4	13·1	16
11·2	11·2	11·0	11·0	11·0	11·0	11·0	11·0	11·0	10·9	2 46	9·4	8 48	12·5	17
11·3	11·3	11·3	11·2	11·1	10·8	10·8	10·7	10·7	11·3	2 19	9·4	8 26	13·6	18
11·2	11·2	11·3	11·2	11·2	11·2	11·0	11·0	10·9	11·2	3 14	7·7	9 12	13·5	19†
11·6	11·6	11·6	11·4	11·2	10·8	11·0	10·8	10·6	11·4	3 13	8·8	7 48	14·2	20†
11·3	11·4	11·5	11·4	11·1	11·1	11·0	10·8	10·7	11·0	3 0	7·6	8 34	13·5	21†
11·4	11·4	11·4	11·3	11·1	10·8	10·8	10·8	10·7	11·0	2 29	8·5	9 16	12·6	22
11·6	10·7	10·7	10·7	10·5	10·1	10·1	10·0	10·2	11·0	3 32	8·2	7 21	14·2	23
11·2	11·3	11·3	11·2	11·0	10·9	10·7	10·5	10·3	10·7	3 2	8·5	8 7	12·6	24
11·0	11·1	10·8	11·2	10·8	10·5	10·3	10·3	10·2	11·0	1 43	8·7	7 51	13·9	25
11·4	11·4	11·2	10·8	10·8	10·7	10·6	10·5	10·5	10·9	2 54	8·7	9 26	12·5	26
11·1	11·2	11·2	11·2	11·2	11·0	10·7	10·6	10·6	11·0	3 39	9·1	7 14	13·6	27
11·4	11·4	11·4	11·1	10·7	10·2	9·6	9·9	9·9	11·2	2 34	8·6	7 12	14·7	28
11·2	11·4	11·3	11·1	10·7	10·6	10·4	10·4	10·2	10·7	2 13	7·7	9 55	15·7	29
11·1	11·1	11·1	10·8	10·7	10·3	10·2	10·2	10·1	**10·5**	3 30	8·3	7 46	12·1	30
11·1	11·1	11·2	11·1	10·9	10·7	10·6	10·6	10·5	10·8	3 12	8·0	8 30	13·5	31
11·3	11·3	11·2	11.0	10·8	10·6	10·5	10·4	10·4	11·0					Mean.
11·4	11·4	11·3	11·2	11·0	10·9	10·8	10·7	10·5	11·1					Mean.†

AUGUST.

11·0	11·0	10·8	10·6	10·4	10·1	10·1	10·0	10·0	10·8	**2** 33	9·3	9 20	13·6	1
11·1	11·2	11·2	10·8	10·7	10·6	10·5	10·5	10·5	11·0	2 10	7·9	7 41	14·3	2†
11.2	11·1	10·9	10·7	10·7	10·3	10·3	10·1	10·1	10·8	1 55	9·2	7 43	12·5	3
11·4	11·4	11·3	11·2	10·6	10·4	10·4	10·4	10·3	10·9	2 34	8·3	8 10	13·2	4
11·5	11·4	11·1	10·5	10·3	10·4	10·0	9·7	9·9	11·1	2 14	9·2	9 30	13·3	5
11·5	11·4	11·3	11·1	10·6	10·4	10·5	10·4	10·3	10 8	3 0	8·6	8 28	13·1	6
10·9	11·3	11·1	10·8	10·6	10·3	10·3	10·1	10·1	11·0	2 4	8·6	9 0	13·0	7
11·1	11·3	11·3	11·3	10·9	10·6	10·3	10·6	10·3	**11·5**	1 22	8·6	9 46	11·9	8
10·5	10·9	10·8	10·7	10·4	10·2	10·2	9·9	9·9	10·9	22 9	9.5	6 4	12·4	9
11·2	11·2	11·0	10·9	10·9	10·7	10·7	11·0	10·5	10·7	1 47	9·2	7 44	12·8	10
11·3	11·3	11·1	11·1	10·6	10·4	10·3	10·2	10·3	10·6	2 30	9·3	14 34	11·9	11
11·3	11·2	11·3	11·3	10·9	10·9	10·9	10·8	10·7	11·2	1 58	9·5	6 29	13·1	12†
11·0	11·3	11·3	11·2	10·9	10·8	10·5	10·5	10·6	11·0	2 18	8·5	6 44	13·6	13
11·2	11·2	11·1	11·1	11·0	11·0	11·0	10·9	11·0	11·1	2 45	8·3	7 41	14·3	14
10·5	10·9	11·2	11·1	11·1	11·0	10·7	10·3	10·1	11·2	2 54	8·4	8 30	14·8	15
11·9	11·9	11·4	11·1	10·7	10·6	10·4	10·5	10·7	11·1	3 12	8·4	9 26	13·5	16
11·1	11·2	11·1	10·9	10·8	10·8	10·8	10·8	10·5	10·8	2 28	7·4	8 26	13·5	17†
10·8	11·0	10·9	10·8	10·9	10·9	11·1	11·1	11·1	10·9	3 27	8·0	8 18	13·6	18†
10·9	11·3	11·3	11·0	10·8	10·7	10·3	10·7	10·3	10·9	3 0	8·5	8 44	13·0	19
10·3	11·1	10·8	10·9	10·9	10·5	10·1	10·1	10·1	**10·5**	3 22	8·3	7 4	13·3	20
10 3	10·4	10·8	10·7	10·6	10·3	10·6	10·7	10·3	10·8	2 12	9·0	9 30	12·9	21
11·1	11·1	11·1	11·0	11·0	11·0	10·9	11·1	11·0	10·7	2 17	9·3	14 48	11·6	22
10·6	10·8	11·0	10·9	10·7	10·6	10·5	10·5	10·5	10·9	2 56	8·3	7 26	13·9	23
12·0	11·4	11·1	10·9	10·8	10·4	10·3	10·1	9·7	11·3	3 3	8·7	7 24	14·2	24
10·9	10·4	10·4	10·5	10·6	10·4	10·3	10·5	10·3	10·5	2 24	**6·8**	6 0	13·3	25
11·2	11·4	11·1	11·1	10·9	10·9	10·2	10·1	10·1	11·3	1 52	8·1	7 3	**15·4**	26
10·8	11·3	11·1	11·1	11·0	10·8	10·3	10·3	10·4	10·8	2 51	7·1	7 52	13·7	27
10·9	11·2	11·0	10·9	10·9	10·9	10·8	10·7	10·4	11.0	2 39	7·4	8 8	14·6	28
11·0	11·1	10·9	10·8	10·8	10·8	10·5	10·7	10·5	10·7	3 6	7·0	8 7	14·2	29
11·1	11·1	10·9	10·9	10·7	10·5	10·4	10·3	10·3	11·0	2 32	8·5	8 17	13·6	30†
11·2	11·2	11·0	10·7	10·2	10·5	10·2	10·2	10·2	10·7	2 30	7·1	7 57	13·9	31
11·1	11·1	11·1	10·9	10·7	10·6	10·5	10·4	10·4	10·9					Mean.
11·0	11·1	11·0	10·9	10·7	10·6	10·6	10·6	10·5	11·0					Mean.†

*See footnote on page 89.
†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

SEPTEMBER. 0° PLUS TABULAR QUANTITIES.

Date.	Hours. (G.M.T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	10·1	9·4	8·5	8·1	9·0	10·9	12·8	14·1	14·4	13·6	12·6	11·5	10·6	10·5	10·9
2†	10·7	9·9	8·9	8·3	9·0	10·5	12·1	13·3	13·6	13·3	12·4	11·3	10·9	10·9	11·2
3	10·7	10·0	9·0	8·3	9·4	12·2	13·6	14·6	**14·6**	13·6	11·8	11·8	12·0	12·2	11·4
4	11·0	10·5	9·4	8·4	9·1	10·5	11·7	13·0	13·5	12·9	11·4	10·7	9·6	10·0	10·1
5	10·4	10·1	9·3	9·2	9·6	10·8	12·4	13·4	13·3	12·5	11·6	10·9	10·3	10·6	11·2
6	10·9	10·4	9·3	8·9	9·4	10·4	12·1	13·3	12·9	12·1	11·6	11·8	11·1	10·2	10·4
7	10·6	10·4	9·3	9·3	10·1	11·2	12·3	13·5	13·3	13·1	12·4	11·6	10·9	10·4	11·0
8	10·6	10·2	9·3	9·3	10·1	10·9	12·2	12·4	12·4	12·2	11·4	10·3	10·0	10·3	10·9
9	11·3	10·4	9·3	9·2	9·3	10·4	11·3	11·5	11·3	11·4	11·3	10·5	10·3	10·2	10·2
10	10·8	9·9	8·9	8·9	9·5	10·7	11·5	12·2	13·2	12·7	11·1	10·3	9·7	10·0	10·4
11	10·1	9·4	8·6	9·2	10·5	12·1	13·3	13·9	13·6	12·8	11·4	10·3	10·3	10·3	10·5
12	10·3	9·5	8·5	8·5	9·9	11·9	13·2	13·5	13·5	12·7	11·4	10·7	10·3	10·4	10·4
13	10·7	9·9	8·9	8·9	9·6	10·8	12·0	12·8	13·3	12·7	11·7	10·6	10·5	10·3	10·5
14	10·6	10·2	8·9	8·7	9·9	10·9	12·2	12·8	12·8	12·2	11·8	10·9	10·2	10·5	10·9
15	11·0	10·0	8·7	8·8	10·3	11·4	12·7	13·7	13·5	11·7	10·0	9·9	10·0	9·8	10·2
16	10·2	9·7	9·3	9·3	10·5	11·9	13·0	13·3	13·4	11·8	11·3	10·8	10·2	9·5	10·5
17	11·0	10·8	9·9	9·8	10·1	10·8	11·9	12·9	12·6	11·6	10·6	9·3	8·9	9·7	10·8
18†	10·6	10·2	9·6	9·4	10·1	11·0	12·1	12·7	12·7	12·6	11·9	10·9	10·7	10·8	10·9
19†	11·0	10·9	9·9	9·7	10·6	11·7	12·6	13·5	13·1	12·7	12·0	11·5	11·3	9·0	10·9
20	11·1	11·0	10·4	9·8	10·9	12·4	13·1	13·2	13·0	11·9	10·6	10·5	10·9	11·5	11·5
21	10·5	10·5	9·6	9·1	10·6	12·2	12·8	13·0	13·4	12·7	12·1	11·4	10·9	11·1	11·4
22	10·7	10·2	8·7	8·1	9·5	10·9	12·7	13·5	13·7	13·2	12·2	11·5	11·6	11·6	11·2
23	10·4	10.2	9·2	9·2	10·2	11·1	12·5	13·5	13·7	10·1	12·0	11·3	11·1	11·4	11·4
24	10·8	10·5	9·2	9·3	10·1	11·4	12·2	12·2	12·8	12·4	11·8	10·8	10·1	10·1	10·3
25	10·3	10·2	9·2	9·2	9·9	11·0	11·9	12·9	13·2	12·7	11·5	10·5	10·5	11·0	11·4
26	10·1	10·0	9·5	9·8	11·0	11·9	12·3	12·6	12·5	12·1	11·4	11·2	11·1	11·1	11·2
27	10·3	10·2	10·1	10·0	11·0	11·5	12·2	12·7	12·4	11·3	10·5	10·4	10·8	11·0	11·4
28†	10·7	10·7	10·5	10·7	11·3	12·0	12·5	13·1	12·7	11·2	10·2	10·2	10·7	11·2	11·3
29†	10·7	10·5	9·8	9·5	10·1	11·6	12·5	13·4	13·5	12·8	11·8	11·0	11·3	11·6	11·4
30	11·5	11·1	9·9	8·8	8·9	9·7	11·9	13·8	13·9	12·1	12·1	11·2	10·7	10·8	10·3
Mean .	10·7	10·2	9·3	**9·1**	10·0	11·2	12·4	13·1	**13·2**	12·4	11·5	10·9	10·6	10·6	10·9
Mean† .	10·9	10·6	9·9	**9·6**	10.3	11·5	12·4	**13·3**	12·5	12·6	11·7	10·9	11·0	10·7	11·2

OCTOBER.

1	11·6	11·6	10·5	9·4	9·4	10·3	12·1	13·5	13·8	13·1	11·8	10·3	10·4	10·7	10·7
2	11·5	10·9	10·4	9·6	9·7	10·6	11·6	12·9	13·4	13·1	11·4	10·2	10·5	10·3	9·9
3	11·3	10·9	10·0	9·7	10·6	11·1	11·7	12·3	12·2	11·8	11·3	10·6	10·4	10·8	11·0
4	11·1	11·1	10·5	10·0	10·5	10·7	11·8	12·4	12·1	11·2	10·6	10·3	10·3	10·0	10·6
5	11·8	11·4	10·3	10·1	10·6	10·5	11·7	12·1	11·1	10·6	11·0	10·7	9·3	9·7	10·8
6	11·0	11·1	10·4	9·8	9·9	10·5	11·4	12·3	12·4	11·1	9·8	9·2	10·0	10·8	11·1
7	11·1	10·7	9·7	9·1	9·5	10·0	10·8	11·6	11·8	11·2	10·7	10·3	10·4	10·8	11·1
8	11·0	10·9	10·5	9·9	10·1	10·7	11·8	12·5	12·5	11·7	10·9	10·8	11·1	11·5	11·5
9†	11·1	10·9	10·2	9·8	10·6	11·9	13·0	12·3	11·8	11·5	11·4	11·2	11·5	11·8	11·5
10†	11·4	11·1	10·7	10·8	11·0	11·6	12·1	12·4	12·2	11·6	10·7	10·3	10·1	11·1	11·4
11†	11·4	10·9	9·8	10·0	11·7	13·3	13·9	**14·3**	14·2	13·2	11·9	11·0	11·0	11·0	11·1
12	11·8	11·1	10·2	9·7	10·1	11·5	12·9	13·5	12·9	11·9	10·4	10·1	10·7	11·2	10·9
13	12·0	12·1	11·0	11·0	11·8	12·9	13·4	13·4	12·3	11·8	11·1	10·8	10·1	9·9	10·9
14	11·3	11·0	10·3	9·6	9·6	11·0	13·0	13·5	13·0	12·0	11·0	10·1	9·7	10·5	10·6
15	10·9	10·8	10·1	9·3	9·8	10·3	11·1	11·5	11·7	11·2	10·8	10·2	10·1	9·9	10·7
16†	11·1	11·0	10·7	10·3	10·2	10·8	11·8	12 3	12·1	12·1	11·6	11·0	10·9	10·4	10·7
17	11·3	11·9	11·3	10·2	10·4	10·1	9·6	10·2	10·1	10·3	10·3	10·2	10·4	10·6	11·1
18	11·0	11·2	11·5	11·3	11·7	12·5	12·9	13·1	12·4	11·7	11·1	11·2	10·5	11·1	11·5
19	11·0	11·0	10·4	10·0	10·5	10·9	11·1	10·9	10·1	9·5	9·9	10·1	10·2	11·1	11·3
20	11·5	11·6	11·4	11·0	11·0	11·0	11·5	11·1	11·5	10·2	9·8	10·0	10·6	11·2	11·2
21	11·3	11·3	11·2	11·2	11·4	11·9	12·8	12·7	12·0	11·6	10·9	10·5	11·5	11·4	11·6
22	11·1	11·2	11·1	10·9	11·0	11·8	12·5	12·7	12·4	11·6	10·5	10·6	10·3	10·8	11·0
23	11·2	11·0	10·9	10·4	10·5	11·1	12·0	12·2	11·7	11·2	11·1	10·7	10·8	11·0	11·2
24	11·0	11·2	10·6	10·0	9 8	10·3	10·3	10·9	10·2	10·0	9·8	10·2	10·8	11·3	11·2
25†	11·1	11·2	10·8	10·0	9·8	10·1	11·2	11·2	10·9	10·7	10·9	10·7	10·7	11·2	11·2
26	11·2	11·3	11·2	10·5	10·5	11·6	12·6	12·8	12·3	12·0	12·1	11·3	11·1	11·2	11·3
27	11·4	11·8	11·7	10·7	10·4	10·8	11·7	12·3	12·3	12·3	12·1	11·4	10·8	10·5	10·2
28	11·4	11·4	11·3	11·1	11·3	12·4	12·7	12·1	11·4	11·1	10·2	10·6	11·1	10·7	10·6
29	11·6	11·5	10·7	10·3	10·3	10·4	10·7	10·6	9·6	9·3	8·6	8·6	8·2	**7·0**	8·2
30	11·1	11·4	11·6	12·0	11·9	11·8	11·4	10·1	10·1	10·1	8·5	8·3	10·7	10·3	8·9
31	11·2	11·3	11·1	10·7	10·9	11·0	11·7	11·6	11·3	11·2	11·2	10·6	10·6	10·6	11·1
Mean .	11·3	11·2	10·7	**10·3**	10·5	11·1	11·9	**12·2**	11·8	11·3	10·7	10·4	10·5	10·7	10·8
Mean† .	11·3	11·1	10·5	**10·2**	10·7	11·6	12·5	**12·6**	12·3	11·9	11·3	10·8	10·8	11·1	11·2

† Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

SEPTEMBER. 0° PLUS TABULAR QUANTITIES.

Hours (G.M.T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′	
11·0	11·0	10·9	10·8	10·6	10·6	10·4	10·5	10·7	11·0	2 59	7·9	7 54	14·8	1
11·3	11·3	11·2	11·1	11·0	10·8	10·6	10·6	10·6	11·0	2 52	8·2	8 5	13·9	2†
11·0	11·1	11·2	11·2	11·0	10·5	10·4	10·7	10·6	**11·4**	3 5	8·1	7 49	**15·1**	3
10·6	10·5	10·5	10·6	10·5	10·5	10·5	10·5	10·4	10·7	3 30	8·2	7 50	14·1	4
11·2	11·2	11·1	11·0	10·7	11·2	10·5	11·1	11·2	11·1	2 46	8·5	7 8	14·1	5
10·6	10·3	10·5	10·3	10·4	10·6	10·9	11·1	10·5	10·8	3 6	8·5	7 36	13·7	6
10·7	10·5	10·8	11·1	11·1	10·7	10·6	10·5	10·7	11·1	2 34	8·5	7 10	14·1	7
11·1	11·1	10·5	10·6	10·5	10·8	11·4	11·3	11·1	10·9	2 30	9·0	7 48	12·8	8
10·5	11·0	10·9	10·4	10·6	10·6	11·0	11·1	10·6	**10·6**	3 8	8·7	9 16	12·1	9
10·6	10·6	10·6	10·8	10·7	10·5	10·4	10·5	10·3	10·6	2 22	8·4	8 32	13·5	10
11·0	11·2	11·2	11·2	11·2	10·8	10·8	10·6	10·5	11·0	2 4	8·3	6 30	14·3	11
10·4	10 9	10·9	10·9	10·7	10·8	10·7	10·4	10·6	10·9	2 46	8·3	8 10	13·8	12
10·7	10·8	10·6	10·7	10·7	10·7	10·7	10·7	10·6	10·8	2 30	8·6	7 50	13·5	13
11·0	10·6	10·7	10·8	10·5	10·3	10·7	11·0	10·7	10·8	2 30	8·4	7 35	13·2	14
10·3	10·5	10·5	10·4	10·0	10·4	10·4	10·4	10·5	10·6	2 31	8·0	7 34	14·2	15
10·6	10·5	10·9	10·7	10·7	10·7	10·7	11·0	11·0	10·9	2 14	9·0	7 49	13·9	16
11·1	11·1	10·8	10·8	10·8	10·7	10·6	10·5	10·6	10·7	11 44	8·5	6 45	13·6	17
11·0	11·0	11·0	11·0	10·9	10·8	10·8	10·8	10·9	11·0	2 58	9·7	8 42	13·0	18†
11·1	11·3	11·1	10·8	10·6	10·7	10·9	11·1	11·0	11·2	2 30	9·5	7 34	13·7	19†
11·5	11·3	11·2	10·8	10·1	9·8	10·2	10·6	10·4	11·1	20 4	9·5	6 58	13·7	20
11·4	11·1	10·9	10·6	10·6	10·6	10·6	10·6	10·5	11·2	2 48	8·8	7 44	13·7	21
11·2	11·2	11·1	10·7	10·3	10·3	10·3	10·6	10·6	11·1	2 51	**7·6**	8 12	14·2	22
11·1	11·0	11·0	11·1	10·9	10·8	10·9	10·8	10·7	11·1	2 7	8·9	7 30	14·2	23
10·7	11·0	11·0	10·9	10·8	10·3	10·4	10·6	10·4	10·8	2 5	8·9	8 22	13·2	24
11·2	11·3	11·3	11·0	10·7	10·6	10·2	10·0	10·2	10·9	2 38	8·9	8 34	13·7	25
11·3	11·2	11·2	11·1	11·1	10·7	10·2	10·3	10·3	11·1	2 11	9·1	6 56	12·9	26
11·4	11·1	11·0	10·7	10·9	10·7	10·7	10·6	10·7	11·0	2 45	9·6	6 46	13·2	27
11·3	11·3	11·2	11·0	11·0	10·9	10·8	10·7	10·7	11·2	11 1	9·9	7 20	13·4	28†
11·4	11·0	11·0	10·9	10·9	11·0	11·0	11·0	11·3	11·3	2 35	9·4	7 40	13·9	29†
10·7	11·0	11·1	11·1	10·9	11·0	11·1	11·3	12·2	11·1	3 47	8·7	7 46	14·3	30
10·9	10·9	10·9	10·8	10·7	10·6	10·6	10·7	10·7	11·0					Mean.
11·4	11·1	11·1	10·9	10·8	10·7	10·7	10·7	10·7	11·1					Mean†

OCTOBER.

10·6	11·0	10·9	10·9	10·9	10·7	10·8	11·0	11·6	11·2	3 28	8·7	8 1	13·9	1
9·9	11·0	10·5	9·8	9·8	10·2	10·5	10·7	11·6	10·8	3 12	9·0	8 3	13·6	2
10·9	11·1	10·9	10·9	10·9	10·9	10·9	11·0	11·1	11·0	2 52	9·3	7 36	12·8	3
11·0	11·3	11·0	10·3	10·0	10·3	10·5	11·2	11·4	10·9	19 2	9·1	6 43	12·8	4
11·1	10·9	10·7	10·6	10·6	11·1	10·8	10·6	10·7	10·8	12 12	8·7	7 6	12·6	5
11·0	11·0	11·0	10·9	10·8	10·8	10·8	10·7	10·9	10·8	10 32	8·7	7 34	12·6	6
11·1	11·1	11·2	11·0	10·9	10·9	10·8	10·9	10·9	10·7	2 58	8·8	7 42	12·0	7
11·5	11·3	11·3	11·3	10·9	11·0	11·0	11·3	11·2	11·2	3 30	9·8	7 33	12·9	8
11·0	11·1	11·0	11·0	10·9	10·9	10·9	11·1	11·2	11·3	2 58	9·3	6 34	13·0	9†
11·4	11·4	11·1	10·8	10·9	10·9	11·1	11·4	11·4	11·2	11 46	9·6	7 26	12·6	10†
11·2	11·1	11·1	11·1	11·1	11·3	11·4	11·3	11·8	**11·7**	2 30	9·3	7 10	**14·9**	11†
10·9	10·6	9·8	10·3	10·3	10·5	10·1	10·8	12·0	11·0	3 16	9·1	7 0	13·6	12
10·9	10·8	10·8	10·9	10·9	10·9	10·9	11·0	11·1	11·3	12 14	9·5	6 30	14·0	13
10·6	10·6	10·9	10·7	10·6	10·8	10·6	10·6	10·7	10·9	3 5	9·0	7 4	13·9	14
10·8	10·9	10·9	10·6	10·6	10·8	10·9	11·0	11·2	10·7	3 6	9·0	7 38	12·0	15
10·8	10·8	10·7	10·7	10·8	10·8	10·8	11·0	11·1	11·0	13 0	10·0	7 4	12·6	16†
11·2	11·2	11·1	11·0	10·9	10·3	10·0	9·8	10·5	10·6	21 50	9·0	1 18	12·1	17
11·6	11·1	10·6	10·5	10·4	10·3	10·3	10·4	10·8	11·3	20 45	9·7	6 34	13·7	18
11·2	11·0	10·7	10·7	10·7	11·1	10·8	10·7	11·1	10·7	9 10	9·1	0 28	11·6	19
11·1	11·1	11·1	11·0	10·9	11·1	11·0	11·1	11·1	11·0	10 13	9·3	6 12	12·0	20
11·2	11·1	10·9	10·8	11·0	10·9	11·1	11·1	11·1	11·3	10 30	10·1	6 27	13·2	21
11·1	10·9	10·5	10·5	10·8	10·5	10·6	10·8	10·9	11·1	12 4	9·9	7 10	13·1	22
11·3	11·2	11·3	11·3	11·2	11·2	11·1	11·5	11·1	11·2	3 44	10·1	6 33	12·7	23
11·0	11·0	11·0	10·9	10·8	10·8	10·8	10·9	11·1	10·7	9 50	9·4	13 28	11·6	24
10·9	10·7	10·9	11·2	11·2	11·2	11·2	11·3	11·4	10·9	3 22	9·5	22 34	11·8	25†
11·3	11·2	11·2	11·2	10·6	10·6	10·7	11·2	11·3	11·3	20 30	10·2	6 34	13·1	26
10·3	10·3	9·6	10·2	10·7	11·0	11·2	11·2	11·3	11·1	16 56	9·2	7 50	12·6	27
11·2	10·8	10·5	10·4	9·2	9·7	10·2	11·0	11·1	11·0	18 58	8·7	5 59	13·3	28
8·1	9·2	9·2	9·5	9·2	10·1	10·8	10·1	10·4	**9·7**	13 32	**6·3**	0 44	11·6	29
9·2	8·8	9·1	10·2	10·7	10·2	10·2	11·1	10·9	10·4	11 12	8·0	2 48	12·1	30
11·2	11·1	11·3	11·3	11·3	11·4	11·3	11·4	11·6	11·2	13 28	*10·5*	6 40	12·3	31
10·9	10·9	10·7	10·7	10·7	10·7	10·8	10·9	11·1	11·0					Mean.
11·1	11·0	10·9	10·9	10·9	10·9	11·0	11·1	11·3	11·2					Mean.†

* See footnote on page 89.

† Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

NOVEMBER. 0° PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	′	′	′	′	′	′	′	′	′	′	′	′	′	′	′
1	11·7	11·5	11·3	10·4	9·8	10·2	11·1	11·6	11·7	11·6	11·6	11·0	11·0	11·1	11·0
2	11·7	11·9	11·6	10·9	10·4	10·3	11·1	11·6	11·4	11·3	11·3	11·4	11·6	11·3	10·9
3	12·3	12·3	12·4	11·8	11·4	11·5	11·8	11·9	11·3	11·2	10·8	11·2	11·3	11·1	10·8
4	12·4	13·2	12·6	12·3	12·2	12·4	12·5	12·5	12·4	11·7	11·3	11·0	11·3	10·9	10·5
5	11·8	11·7	12·0	12·0	12·4	12·9	13·7	13·5	12·0	10·4	11·0	11·2	11·2	11·3	11·5
6	11·9	11·1	11·7	11·3	10·7	10·6	10·5	10·7	10·4	10·2	10·3	10·1	10·9	11·1	11·3
7	11·6	12·1	12·3	12·2	12·0	11·9	12·5	11·6	10·5	9·8	9·8	10·4	10·7	10·4	11·3
8	11·8	11·9	12·0	11·8	11·7	11·6	11·4	11·2	10·4	9·7	9·6	10·3	10·8	10·5	10·6
9	12·5	12·5	12·8	12·9	11·9	12·1	12·4	12·5	11·5	11·0	11·5	11·7	11·0	10·6	10·6
10	12·3	12·5	12·4	11·8	11·5	11·3	11·4	11·1	10·5	10·3	10·5	10·9	11·6	11·4	11·3
11	11·7	11·9	12·0	11·7	11·4	11·8	12·3	12·2	11·4	10·7	9·8	9·8	11·7	10·6	10·7
12†	11·6	11·6	11·4	11·2	11·7	12·1	12·5	12·3	11·6	11·4	10·8	10·6	11·3	11·5	11·5
13	12·6	13·1	13·1	12·7	12·1	11·6	11·6	11·5	11·0	10·7	10·4	10·6	11·0	11·5	11·5
14	11·4	11·6	12·4	12·5	12·1	11·8	11·7	12·4	11·9	11·6	11·5	11·5	10·8	10·5	11·5
15	11·4	11·5	12·3	12·2	12·0	11·9	11·9	11·5	11·5	11·4	11·4	11·0	11·0	10·9	11·4
16	11·9	12·5	12·3	11·7	11·5	11·6	11·5	12·1	11·5	11·5	11·5	11·1	11·1	11·4	11·0
17	11·8	11·9	12·2	12·5	12·5	13·1	13·9	13·8	12·8	12·5	11·5	11·0	11·9	11·1	11·0
18	12·0	11·8	11·9	12·2	12·2	12·2	12·1	11·9	11·5	10·8	10·8	11·0	10·9	10·6	10·8
19	11·6	11·6	12·0	12·6	12·6	12·5	12·6	12·5	11·9	11·3	11·1	11·2	10·6	10·9	11·5
20	11·5	11·5	11·5	11·5	11·5	12·2	12·5	12·4	12·1	11·4	11·2	11·3	11·4	11·5	11·5
21†	11·7	11·7	12·1	11·9	11·6	11·8	12·3	12·0	11·1	10·6	10·6	10·8	11·2	11·4	11·4
22†	12·0	12·1	12·5	12·1	11·6	12·1	12·7	12·4	11·8	11·6	11·5	11·4	11·3	11·3	11·5
23	12·1	12·3	12·4	11·7	11·6	11·7	11·6	11·4	10·6	10·1	10·1	10·1	11·1	11·6	11·6
24	11·7	11·8	11·9	11·5	11·1	11·2	10·9	10·9	10·7	10·7	10·7	10·7	11·1	11·5	11·5
25	12·4	12·7	13·4	12·7	12·1	12·0	11·6	11·3	10·6	10·6	10·7	10·9	11·2	11·3	11·2
26	12·6	12·6	13·2	12·8	12·9	12·8	13·0	13·1	12·3	11·9	11·5	11·5	11·1	9·4	10·4
27	12·5	12·6	12·7	12·7	12·2	12·3	12·4	11·9	11·5	10·7	10·9	11·1	11·5	11·6	11·5
28†	11·7	11·9	12·0	11·6	11·6	11·6	11·6	11·9	11·7	10·9	10·6	10·5	10·6	11·0	11·4
29	12·5	12·7	12·6	12·4	11·7	11·6	11·5	11·3	10·8	10·3	10·2	10·8	11·3	11·2	11·2
30†	12·5	12·4	12·8	12·9	12·6	12·7	12·6	12·2	11·5	10·9	10·5	10·5	10·7	11·0	11·3
Mean .	12·0	12·1	12·3	12·0	11·8	11·9	12·1	12·0	11·4	11·0	10·8	10·9	11·1	11·1	11·2
Mean† .	12·1	12·1	12·3	12·1	11·9	12·2	12·4	12·2	11·6	11·1	10·8	10·8	11·0	11·2	11·4

DECEMBER.

1	11·9	12·3	12·7	12·6	12·6	12·6	12·7	12·3	11·7	11·6	11·4	11·0	10·8	10·4	10·9
2	12·1	12·6	13·2	12·7	12·7	12·6	12·5	12·0	10·6	10·0	10·5	11·2	10·1	10·7	11·1
3	12·6	13·2	13·1	13·2	12·7	12·1	11·8	11·7	11·4	10·6	10·4	10·4	10·2	10·3	10·6
4	11·8	12·3	12·5	12·5	12·0	11·8	11·7	11·7	10·4	10·1	10·8	11·0	10·7	10·4	10·7
5	12·6	13·0	12·8	13·1	12·8	12·8	12·5	12·5	11·6	10·3	9·9	10·2	10·1	9·3	10·0
6	11·9	12·5	12·9	12·7	12·6	12·6	12·3	11·9	11·1	10·5	10·7	10·7	10·0	10·5	11·2
7	12·2	12·1	12·3	12·2	12·3	12·1	12·1	12·0	11·1	10·9	10·9	10·7	11·1	11·0	11·2
8	11·9	11·9	12·0	11·8	11·7	11·9	11·7	11·7	11·5	11·3	11·2	10·9	11·2	11·5	11·5
9	12·5	12·4	12·5	12·6	12·2	12·3	12·7	11·9	10·9	10·0	10·2	10·5	11·1	11·5	11·4
10	12·6	12·8	13·3	13·6	12·7	12·7	12·4	11·9	10·8	10·5	9·4	9·8	10·7	11·1	11·1
11	11·9	12·2	12·7	12·9	13·2	13·1	13·1	12·7	11·9	11·1	10·6	10·8	11·1	11·5	11·4
12	11·7	11·6	12·3	12·2	11·8	12·4	12·8	12·7	11·8	11·1	10·5	10·7	10·3	10·7	10·9
13	11·4	11·8	11·9	12·0	11·9	11·7	11·6	11·3	10·7	10·5	10·7	10·6	10·9	10·9	10·9
14	11·8	11·9	12·0	11·8	12·0	12·9	13·4	13·2	11·9	11·6	11·5	11·5	11·5	11·5	11·6
15	12·2	12·5	12·9	12·8	12·7	12·5	12·1	11·7	11·6	11·2	11·2	10·9	11·6	11·5	11·5
16	12·1	12·5	12·7	12·8	12·7	12·2	12·5	12·6	11·9	11·5	11·4	11·1	11·4	11·4	11·4
17	12·0	12·6	12·9	12·7	12·9	12·5	12·6	12·4	12·2	12·0	11·5	11·1	11·3	11·4	11·7
18	12·0	12·2	12·7	12·5	12·0	11·7	11·8	12·4	12·6	12·1	11·5	11·3	11·5	11·7	11·7
19†	11·7	12·2	12·6	12·9	12·6	12·5	12·6	12·7	12·5	12·3	12·0	11·7	11·7	11·9	11·7
20†	12·0	12·2	12·5	12·7	12·4	12·6	12·8	12·5	11·9	11·7	11·5	11·7	11·9	11·9	11·9
21†	12·4	12·5	12·9	12·9	12·9	12·5	11·9	11·6	11·5	11·7	11·2	11·1	11·7	11·7	11·7
22	12·2	12·6	13·4	13·3	12·9	12·3	12·5	13·5	13·0	12·5	11·9	11·6	11·6	11·7	11·7
23	12·8	12·8	13·3	12·8	12·4	12·6	12·6	12·6	12·6	12·2	11·7	11·7	11·8	11·7	11·7
24	12·2	12·7	13·0	13·5	13·4	13·4	13·6	13·3	12·9	11·9	11·3	11·3	11·7	11·7	11·7
25	12·5	12·7	13·4	13·8	13·2	12·7	12·2	12·2	11·6	10·6	10·8	10·8	11·6	11·6	11·6
26†	12·2	12·4	12·8	12·7	12·1	11·4	10·9	11·1	11·6	11·7	11·6	11·6	11·5	11·7	11·7
27†	12·3	12·7	12·6	12·7	12·3	12·3	12·5	12·7	12·6	11·7	11·4	11·2	11·1	11·5	11·7
28	12·3	12·4	12·9	12·8	12·5	11·8	12·2	12·7	12·3	12·3	11·8	11·7	11·7	11·6	11·5
29	12·5	12·4	12·8	12·9	12·0	11·4	11·1	11·7	11·6	10·7	9·3	9·1	11·7	10·9	10·1
30	12·9	13·2	13·0	12·7	12·4	12·7	12·8	12·5	12·4	11·7	10·9	10·5	10·6	10·7	10·2
31	12·8	12·8	12·4	12·5	11·8	11·8	12·3	12·4	11·8	11·4	10·6	10·6	11·1	11·1	11·1
Mean .	12·2	12·4	12·7	12·7	12·5	12·3	12·3	12·2	11·7	11·3	11·0	10·9	11·1	11·2	11·3
Mean† .	12·2	12·4	12·7	12·9	12·5	12·3	12·1	12·1	12·0	11·8	11·5	11·4	11·5	11·8	11·7

† Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

NOVEMBER. 0° PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
′	′	′	′	′	′	′	′	′	′	H. M.	′	H. M.	′	
11·0	10·8	10·6	10·7	10·7	10·9	11·1	11·4	12·0	**11·1**	4 0	9·6	22 58	12·1	1
10·6	10·2	10·6	10·6	10·9	11·1	11·5	11·6	12·3	11·2	16 2	10·1	20 30	12·4	2
10·8	10·8	11·1	11·1	11·1	11·4	11·7	11·7	11·9	11·5	15 46	10·7	1 38	12·4	3
10·7	11·2	11·4	11·4	11·4	11·4	11·4	11·5	11·6	11·7	13 50	10·5	0 50	13·4	4
11·3	10·8	10·4	10·5	10·7	11·3	11·4	11·2	11·6	11·6	16 34	9·7	3 50	13·8	5
11·4	11·4	11·4	11·3	11·4	11·4	11·5	11·7	11·5	11·1	8 2	10·4	3 54	12·0	6
11·3	11·4	11·4	11·4	11·3	11·5	11·5	11·7	11·9	11·4	9 16	9·8	6 40	12·6	7
11·5	11·5	11·4	11·4	11·5	11·3	12·0	11·7	12·1	11·3	9 44	9·4	21 40	13·0	8
10·9	11·0	11·0	10·9	10·9	11·1	11·1	11·4	11·6	11·5	13 22	10·3	2 56	13·1	9
11·2	11·4	11·0	10·9	10·8	11·0	11·1	11·3	11·5	11·3	9 40	10·3	1 0	12·6	10
11·0	11·4	11·3	10·9	10·8	10·8	11·3	11·5	11·5	11·2	10 48	9·6	6 40	12·4	11
11·5	11·5	11·5	11·5	11·5	11·7	11·8	12·1	12·5	11·6	11 32	10·5	6 20	12·5	12†
11·5	11·5	11·5	11·5	10·9	10·6	10·8	10·8	10·8	11·4	10 40	10·4	2 0	13·2	13
11·3	11·4	11·5	10·9	11·3	11·3	10·7	11·2	11·4	11·5	13 24	10·3	2 40	12·7	14
11·5	11·5	11·6	10·9	11·5	11·5	11·6	11·7	12·5	11·6	18 40	10·6	23 12	12·6	15
10·8	10·7	11·0	10·8	10·7	11·2	11·7	11·9	11·7	11·5	15 48	10·4	1 36	12·6	16
11·1	11·3	11·5	11·5	10·9	11·3	11·6	11·8	11·9	**11·9**	19 38	10·5	6 24	**14·1**	17
11·5	11·0	11·5	11·5	11·4	11·3	11·1	11·0	11·5	11·4	13 20	10·5	5 24	12·5	18
11·5	11·5	11·5	11·6	11·6	11·7	11·1	10·7	11·4	11·6	12 20	10·5	3 8	13·1	19
11·6	11·6	11·6	11·6	11·5	11·5	11·6	11·6	11·7	11·6	11 52	11·0	5 48	12·6	20
11·7	11·6	11·6	11·6	12·5	11·5	11·5	11·6	11·8	11·5	9 6	10·5	2 44	12·4	21†
11·6	11·6	11·5	11·5	11·5	11·5	11·5	11·6	11·9	11·7	12 54	11·0	6 20	12·7	22†
11·6	11·6	11·6	11·6	11·5	11·5	11·6	11·6	11·6	11·4	9 40	10·1	2 28	12·5	23
11·5	11·5	11·5	11·4	11·4	11·5	11·7	11·9	12·1	11·4	8 40	10·6	2 34	12·2	24
11·3	11·7	11·7	11·7	11·6	11·7	11·8	11·8	12·5	11·7	9 0	10·6	2 24	13·7	25
10·1	10·6	11·2	11·6	11·3	11·5	11·3	11·8	11·7	11·7	13 36	**8·0**	3 0	13·6	26
11·6	11·7	11·5	11·2	11·3	11·7	11·7	11·4	12·1	11·7	9 16	10·6	2 40	12·7	27
11·6	11·6	11·6	11·6	11·6	11·7	11·9	11·1	12·5	11·5	11 0	10·1	2 40	12·1	28†
11·4	11·5	11·5	11·4	11·5	11·6	11·6	11·9	12·2	11·5	10 20	10·1	2 8	12·8	29
11·5	11·6	11·6	11·6	11·7	11·7	11·8	11·7	12·0	11·7	10 40	10·4	2 52	13·3	30†
11·3	11·3	11·3	11·3	11·3	11·4	11·5	11·6	11·8	11·5					Mean.
11·5	11·5	11·5	11·5	11·5	11·5	11·6	11·7	12·0	11.6					Mean.†

DECEMBER.

11·4	11·1	11·1	12·0	11·4	11·5	11·5	11·4	11·6	11·7	13 4	9·8	3 58	12·8	1
11·4	11·4	11·6	11·6	11·7	12·1	11·3	10·8	11·9	11·6	12 18	9·5	1 50	13·3	2
11·0	11·5	11·1	11·3	11·4	11·6	11·7	11·5	11·8	11·5	11 24	9·7	1 8	13·5	3
10·4	10·2	10·2	11·3	11·5	11·4	11·6	11·9	12·5	11·4	8 34	9·8	1 30	12·7	4
10·3	10·7	11·3	11·4	11·3	11·4	11·6	11·8	11·8	11·5	12 30	**8·7**	1 6	13·5	5
11·6	11·3	11·6	11·5	11·6	11·5	11·5	11·7	12·2	11·6	11 54	9·7	2 10	13·2	6
11·1	11·1	11·1	10·9	11·1	11·2	11·4	11·6	11·7	11·5	11 2	10·6	2 0	12·5	7
11·6	11·7	11·7	11·7	11·8	11·8	11·9	11·8	12·2	11·7	10 38	10·8	23 50	12·5	8
11·3	11·7	11·7	11·6	11·7	11·5	11·5	11·8	12·2	11·6	9 34	9·8	5 50	12·7	9
11·3	11·5	11·5	11·5	11·5	11·5	11·5	11·6	11·7	11·6	10 10	9·3	2 34	13·7	10
11·5	11·7	11·6	11·4	10·6	10·3	10·6	10·7	11·1	11·7	19 24	9·7	4 10	13·2	11
11·2	11·4	11·5	11·5	11·8	11·4	11·2	10·7	11·4	11·5	12 0	10·1	6 40	13·2	12
10·7	10·7	11·3	11·5	11·3	11·3	11·6	11·2	11·7	**11·3**	9 0	10·2	3 30	12·3	13
11·6	11·7	11·7	11·6	11·5	11·6	11·5	11·8	12·5	11·9	9 44	11·0	6 10	13·6	14
11·5	11·7	11·7	11·8	11·6	11·6	11·6	11·2	11·5	11·8	10 38	10·7	2 10	12·9	15
11·7	11·6	11·6	11·3	11·3	11·5	11·2	11·7	12·1	11·9	10 50	10·8	3 30	12·8	16
11·9	11·7	11·7	11·7	11·3	11·3	11·5	11·7	11·9	11·9	11 30	10·8	1 50	13·3	17
11·7	11·7	11·7	11·7	11·7	11·7	11·7	11·7	11·7	11·9	10 50	11·1	1 58	12·8	18
11·9	12·0	12·0	11·7	11·7	11·7	11·7	11·7	11·9	12·1	11 30	11·3	2 50	13·0	19†
11·8	11·9	11·9	11·9	11·9	11·9	11·8	12·0	12·0	12·1	9 54	11·4	3 0	13·0	20†
11·8	11·7	11·9	11·8	11·7	11·7	11·7	11·8	11·8	11·9	10 30	11·0	2 30	13·3	21†
12·0	11·9	11·8	11·8	11·8	11·9	11·8	12·2	12·5	**12·3**	11 0	11·3	2 20	13·5	22
12·0	11·7	11·5	11·1	10·8	11·1	10·7	11·0	11·5	11·9	23 18	10·5	2 0	13·5	23
11·7	11·7	11·7	11·7	11·7	11·7	12·1	12·6	12·7	12·3	10 30	11·3	6 0	13·8	24
11·7	11·7	11·5	11·5	11·9	11·2	11·6	11·6	11·9	11·9	9 10	10·7	2 58	**14·2**	25
11·7	11·8	11·7	11·6	11·8	11·8	11·9	12·2	12·2	11·8	5 54	10·9	2 30	13·0	26†
11·7	11·7	11·7	11·7	11·7	11·7	11·7	11·8	12·3	12·0	11 50	11·1	2 50	12·8	27†
11·3	11·3	10·8	10·9	11·4	11·7	11·7	11·7	12·2	11·9	17 50	10·7	2 4	13·2	28
10·8	10·4	10·7	11·3	11·6	11·8	11·8	12·2	12·7	11·3	10 38	8·7	2 50	13·3	29
10·4	10·7	11·1	11·4	11·7	12·1	12·3	12·4	12·6	11·8	14 6	9·7	0 45	13·4	30
10·7	10·6	11·3	11·3	11·9	12·3	11·8	11·7	12·2	11·7	10 6	10·2	0 26	13·2	31
11·4	11·4	11·5	11·5	11·5	11·6	11·6	11·7	12·0	11·7					Mean
11·8	11·8	11·8	11·7	11·7	11·7	11·7	11·8	12·0	12·0					Mean.†

* See footnote on page 89.

† Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

JANUARY. 37000γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	305	304	304	309	313	321	324	321	321	316	312	303	297	301	305
2	293	298	302	318	327	333	332	325	317	314	308	304	302	301	298
3†	303	304	307	311	312	314	318	317	308	302	300	300	300	300	298
4	301	304	311	316	322	325	326	323	321	319	312	303	305	306	305
5	307	310	309	311	309	312	320	321	318	319	314	313	313	311	310
6	308	310	317	331	341	347	347	341	332	326	321	318	313	314	311
7†	313	314	317	322	325	330	336	341	336	330	327	323	317	312	311
8†	316	317	320	322	323	331	340	338	333	330	326	323	320	316	315
9	325	317	314	329	329	331	345	350	343	337	322	307	306	290	298
10	307	299	297	298	310	310	325	326	309	297	298	292	288	287	287
11	292	293	296	303	306	306	303	295	292	285	287	291	298	301	304
12	292	298	300	303	306	311	316	315	307	302	303	300	299	301	299
13	303	305	306	312	320	329	338	339	337	329	320	312	306	301	299
14	305	308	309	314	318	323	322	318	314	307	307	312	311	309	308
15	303	304	306	302	310	318	335	345	340	333	325	326	314	311	302
16	312	307	312	318	325	322	328	335	324	309	299	287	282	284	289
17	304	297	298	303	308	308	303	303	300	293	285	254	234	250	266
18	295	298	299	298	307	314	307	301	293	270	276	282	285	290	286
19	289	293	300	307	316	328	330	315	306	296	289	285	282	288	291
20	301	303	304	311	323	334	339	333	329	323	320	314	307	296	288
21	298	302	307	317	322	328	332	324	314	311	307	302	303	303	303
22	303	305	307	312	317	325	332	335	333	321	308	310	305	297	295
23	305	310	305	301	303	311	324	328	323	316	310	306	302	300	300
24†	308	308	310	314	321	336	345	343	337	334	327	314	311	314	311
25	317	320	324	332	343	348	356	352	346	346	336	329	323	320	316
26	275	275	276	278	285	295	302	305	301	297	297	293	291	291	289
27	294	296	297	297	306	316	319	327	334	331	324	318	311	307	301
28	284	292	292	294	294	299	306	306	296	293	292	290	286	291	283
29	299	299	298	297	297	299	305	312	314	315	311	302	282	267	279
30†	299	302	307	311	311	314	323	316	303	296	295	296	302	305	304
31	312	315	317	319	325	332	342	343	335	322	314	312	310	305	303
Mean . .	302	303	305	310	315	321	327	326	320	314	309	304	300	299	299
Mean†. .	311	312	315	318	320	327	334	333	324	319	315	311	310	309	307

FEBRUARY.

1	310	311	316	325	326	325	328	326	324	316	309	309	311	311	312
2	292	309	302	304	307	320	324	322	304	289	287	295	296	294	294
3	307	309	314	327	322	325	326	330	328	319	312	306	304	301	302
4	301	305	310	318	323	331	341	335	318	294	287	283	285	295	295
5	300	308	313	317	321	324	333	340	339	329	318	312	308	308	307
6†	307	307	310	315	319	326	333	335	330	325	315	312	311	313	312
7	312	313	312	318	325	335	343	344	341	331	316	313	312	311	309
8	307	305	304	304	309	317	325	335	332	328	328	321	316	313	311
9	307	307	311	318	323	333	340	349	340	331	327	325	320	311	311
10†	310	311	311	311	317	324	326	330	330	326	320	318	314	313	315
11	317	317	316	323	332	340	348	346	336	330	329	328	327	321	316
12†	308	311	314	314	318	328	335	340	339	335	330	327	322	319	316
13	315	321	321	323	332	335	339	336	335	346	365	375	383	339	323
14	302	311	301	299	296	302	306	313	319	312	290	281	291	285	291
15	304	303	306	309	318	320	318	317	313	294	301	292	296	290	293
16	295	297	305	311	311	317	322	324	318	314	309	308	310	309	302
17	307	306	306	311	320	331	339	340	329	322	314	307	305	305	303
18	310	314	316	323	329	332	338	339	329	320	314	310	311	313	311
19	314	315	316	323	333	343	354	353	346	340	335	329	323	319	316
20†	312	313	316	313	317	329	338	340	336	329	323	317	316	317	319
21†	314	317	317	322	329	338	344	351	347	336	332	327	321	319	315
22	314	313	313	323	337	344	349	350	347	341	334	331	325	319	314
23	313	315	315	319	324	332	342	347	344	335	325	319	311	306	309
24	311	313	312	319	331	346	323	324	319	316	316	297	261	252	231
25	256	270	296	311	320	319	321	311	305	301	301	301	287	279	263
26	302	299	291	292	301	310	320	319	309	304	302	292	289	282	281
27	290	287	287	297	302	311	324	323	306	308	306	300	292	285	280
28	298	301	304	311	319	328	329	324	311	302	302	306	307	307	308
Mean .	305	307	309	314	320	327	333	334	328	320	316	312	309	305	302
Mean† .	312	314	315	316	321	330	337	340	337	331	325	320	317	316	315

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

JANUARY. 37000γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
305	300	299	304	305	297	284	289	293	305	6 10	325	21 20	278	1
298	299	300	301	302	301	298	302	302	307	5 28	336	0 02	293	2
299	299	299	299	299	299	298	298	299	303	6 16	319	13 38	296	3†
303	302	301	303	303	305	305	306	307	310	6 05	326	11 05	299	4
310	310	309	307	307	308	308	308	307	311	6 34	323	23 16	305	5
311	311	311	311	311	310	309	310	312	320	5 15	351	20 40	306	6
312	312	311	311	312	313	312	311	314	319	7 10	342	16 24	309	7†
313	312	313	315	315	316	317	318	321	321	6 06	341	16 15	310	8†
291	286	291	291	300	297	289	285	293	311	6 51	353	22 50	272	9
287	292	291	284	282	305	298	291	290	298	7 04	328	19 02	278	10
303	298	290	293	285	285	282	281	291	294	4 48	306	21 30	279	11
298	292	288	286	290	292	295	298	298	299	6 26	316	18 02	283	12
296	294	291	291	292	293	294	301	303	309	6 52	341	17 10	289	13
307	307	307	309	308	303	305	304	303	310	5 02	323	23 18	301	14
298	303	306	307	305	312	313	311	305	314	6 58	345	14 58	294	15
292	269	277	293	292	290	286	305	299	302	7 27	340	16 00	265	16
265	290	283	289	299	289	289	289	290	287	3 38	311	12 02	183	17
273	267	270	283	286	289	287	287	288	289	5 08	317	16 43	268	18
293	295	295	293	295	300	300	297	296	299	5 30	334	12 06	281	19
285	295	285	278	278	285	290	291	295	304	6 00	341	18 03	276	20
301	299	297	295	295	294	294	296	301	306	5 51	334	18 22	291	21
300	302	304	305	305	305	306	306	306	310	6 30	336	13 56	293	22
294	292	294	298	301	304	305	306	310	306	6 36	329	15 42	291	23
309	306	309	309	313	317	316	316	317	319	6 58	345	16 00	304	24†
314	318	316	317	324	303	291	280	276	322	6 10	359	22 38	274	25
289	290	291	287	292	295	295	295	295	291	7 10	307	1 06	272	26
291	284	278	284	295	294	297	289	284	303	8 13	335	16 43	274	27
295	293	294	295	294	294	291	290	291	293	7 14	308	0 04	281	28
275	272	280	286	289	291	290	295	278	293	9 11	317	13 06	265	29
303	305	308	308	308	305	304	306	311	308	5 41	324	9 26	294	30†
305	301	297	296	305	304	313	304	307	314	6 26	344	17 34	293	31
297	297	297	298	300	300	299	299	299	306					Mean
306	306	307	307	308	308	307	307	309	314					Mean†

FEBRUARY.

311	309	307	307	308	311	304	289	299	312	6 02	329	22 06	288	1
291	289	291	293	296	301	298	306	304	301	6 26	327	9 38	282	2
297	295	295	296	297	296	296	298	301	308	7 06	331	17 26	292	3
296	292	295	293	298	297	298	302	299	304	6 06	343	11 22	281	4
307	306	307	308	310	306	307	306	306	314	6 42	341	0 06	276	5
313	313	310	307	310	307	304	303	303	314	6 42	335	21 54	301	6†
308	312	312	314	316	313	313	314	309	318	7 06	345	13 37	304	7
309	308	308	308	308	309	312	313	309	314	6 56	335	2 54	303	8
312	306	312	306	308	310	310	312	310	319	6 33	352	16 30	305	9
313	313	312	312	313	314	315	314	316	317	7 18	330	1 30	310	10†
310	309	313	310	310	305	298	301	305	320	6 18	350	21 04	297	11
311	306	303	304	306	309	311	314	316	318	6 50	339	17 48	299	12†
317	303	287	283	280	293	298	328	308	324	12 14	398	17 08	275	13
287	281	299	292	306	300	296	297	311	299	8 28	321	10 49	274	14
285	275	282	278	283	286	293	299	294	298	4 45	323	15 38	265	15
300	300	300	301	303	302	305	307	306	308	6 50	326	0 42	291	16
303	301	301	309	309	310	311	308	310	313	6 28	342	17 06	296	17
317	305	301	307	307	309	311	312	314	316	6 25	341	17 12	298	18
312	317	301	300	302	305	309	310	312	321	6 14	356	17 10	299	19
318	316	317	318	317	313	314	314	313	320	7 00	340	19 44	311	20†
314	313	312	312	313	313	312	314	313	323	6 58	352	21 24	309	21†
311	314	315	314	313	312	309	311	312	324	6 30	396	18 53	308	22
312	309	308	311	314	315	315	315	319	320	6 50	348	13 12	303	23
239	212	212	199	203	213	234	253	258	273	4 51	351	18 26	187	24
249	233	235	244	248	259	283	287	285	283	5 10	323	16 51	226	25
279	274	278	284	288	289	289	298	293	294	6 36	327	15 46	266	26
279	289	296	291	296	308	298	298	297	298	6 10	329	13 38	279	27
305	302	301	301	301	302	306	303	302	307	5 34	331	17 47	297	28
300	296	297	297	299	300	302	305	305	310					Mean
313	311	310	309	311	310	310	319	311	318					Mean†

*The daily mean values of horizontal force derived from 24 hourly values have been corrected for progressive change by 1/48th of the difference between the values of the initial and terminal hours.

†Five international quiet days.

133516

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

MARCH. 37000γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	305	305	304	305	314	321	333	335	327	318	305	307	311	309	311
2	314	316	319	329	345	355	364	364	364	353	342	333	320	324	319
3	307	311	315	315	312	322	326	329	317	304	304	301	305	308	302
4	306	305	306	313	324	334	339	339	335	322	312	310	310	311	310
5	314	318	313	315	323	337	353	359	352	348	342	331	315	304	297
6†	314	313	314	322	337	349	373	351	349	337	323	314	305	306	311
7	313	313	314	323	333	350	367	372	363	345	340	330	321	313	315
8	325	324	323	328	334	345	359	367	359	353	339	330	327	330	327
9	318	319	313	313	323	342	354	358	353	346	338	325	312	306	303
10	310	312	314	320	326	336	345	345	339	336	331	328	324	324	324
11†	320	316	315	323	325	336	345	349	349	338	331	328	329	325	322
12	319	326	330	335	343	355	367	368	356	349	335	330	331	332	333
13	297	298	312	319	321	321	326	331	335	325	315	305	293	302	306
14	313	305	305	307	321	333	338	333	336	314	311	305	307	302	302
15	308	311	316	325	342	350	356	360	352	339	327	316	308	308	313
16	313	316	320	327	343	358	360	353	342	335	325	311	310	312	314
17	315	314	315	316	325	333	341	342	337	333	325	320	316	315	311
18†	315	317	320	326	337	352	362	361	353	342	326	317	321	321	319
19†	318	319	321	329	344	361	377	382	374	362	347	334	327	323	321
20	321	321	322	331	339	349	363	365	360	352	339	330	324	322	322
21	317	318	317	320	340	357	365	375	371	366	344	321	289	269	289
22	300	298	294	302	305	312	331	337	331	327	324	320	317	312	312
23	291	291	299	312	313	330	335	332	326	319	316	310	308	309	302
24	301	297	293	300	309	314	320	315	311	303	298	300	298	291	291
25	300	303	305	310	321	327	332	328	318	305	300	290	296	296	297
26	309	318	318	315	324	337	337	335	339	333	323	315	304	302	290
27	303	307	310	319	327	331	342	344	346	340	328	321	313	312	310
28	305	302	307	315	319	337	343	340	327	319	313	307	306	309	309
29	309	308	308	315	322	326	333	332	323	319	317	315	313	313	311
30†	310	310	313	317	328	341	346	344	339	331	324	319	313	311	310
31	316	315	317	324	336	348	357	356	347	339	333	327	317	302	293
Mean .	311	311	313	318	328	339	347	349	343	334	325	318	313	310	310
Mean† .	316	316	317	324	335	348	357	358	353	342	330	322	319	317	317

APRIL.

1	318	318	321	327	341	354	362	364	360	351	338	332	330	323	317
2	301	303	304	310	325	337	342	339	337	330	317	311	316	317	319
3	329	333	334	342	348	360	361	352	348	343	335	329	326	322	320
4	294	294	295	299	310	328	337	336	336	335	331	324	316	308	302
5	302	308	302	303	309	325	338	341	341	333	323	318	315	312	312
6†	314	317	321	327	340	353	361	361	351	339	329	322	314	311	307
7	315	316	317	323	337	355	365	368	361	349	338	334	327	324	323
8	330	323	323	330	348	363	370	365	358	353	343	331	325	322	324
9	320	317	315	319	328	342	353	359	355	351	344	336	328	322	318
10	338	329	321	320	337	345	348	347	335	334	334	323	311	297	293
11	307	310	310	317	333	348	358	353	337	326	321	305	295	293	286
12†	306	305	305	309	316	328	338	336	331	327	322	315	310	306	305
13†	309	309	313	319	332	345	352	349	342	336	329	323	319	316	313
14†	315	317	319	324	334	349	359	357	350	345	345	342	337	326	320
15	316	317	324	333	345	360	362	359	353	348	336	331	326	324	323
16	316	317	318	325	337	350	356	356	352	342	339	335	326	322	319
17	327	327	328	338	354	369	373	368	358	352	342	331	322	317	317
18	324	316	323	322	326	339	347	351	350	346	329	324	308	296	293
19	310	309	311	319	332	346	353	348	343	333	329	322	320	317	329
20	306	295	292	295	304	316	321	317	302	289	259	256	280	285	283
21	304	308	314	325	339	350	356	357	351	343	335	328	324	321	318
22	319	321	314	324	337	342	348	347	340	329	323	315	310	308	304
23	305	309	313	323	332	342	347	348	342	336	327	319	319	310	305
24	313	317	317	322	335	347	354	351	344	333	324	320	317	315	311
25	322	322	320	326	337	354	363	360	355	342	328	328	327	324	322
26	316	320	322	331	340	340	343	339	333	323	318	322	320	316	311
27	314	311	315	322	337	351	357	357	348	337	328	323	319	317	313
28	318	318	319	329	342	352	360	360	355	348	338	339	334	337	334
29†	323	323	328	337	353	359	360	360	354	344	336	331	326	321	317
30	321	320	329	341	359	370	376	381	374	360	342	335	329	325	325
Mean .	315	315	316	323	335	347	354	353	347	339	329	323	319	315	313
Mean† .	314	315	318	324	336	347	355	353	346	338	332	327	321	316	312

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

MARCH. 37000γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
305	306	307	307	310	308	310	311	314	312	6 46	337	10 28	300	1
302	286	291	286	288	286	292	297	302	320	6 16	366	15 50	284	2
296	297	302	303	293	301	306	305	305	308	6 26	330	19 10	290	3
309	310	312	315	315	312	314	311	317	317	7 20	310	0 24	304	4
305	306	301	306	315	317	318	317	317	322	6 46	360	13 35	294	5
310	309	309	309	310	312	312	312	313	321	6 22	353	12 22	300	6†
317	316	313	314	317	320	324	324	320	329	7 04	333	17 00	308	7
322	322	322	309	305	307	307	311	309	328	6 10	369	18 34	298	8
301	301	299	297	297	301	309	313	310	319	6 38	362	18 20	293	9
315	297	299	307	320	320	318	320	320	322	6 10	347	15 54	292	10
321	319	314	313	319	319	318	318	319	325	7 30	349	18 00	311	11†
329	322	321	316	310	301	293	315	304	329	7 04	369	20 26	285	12
306	299	301	301	321	319	302	302	320	312	19 16	336	11 46	287	13
299	297	294	299	299	300	303	307	307	310	6 20	339	16 24	294	14
311	310	315	314	316	317	317	317	316	324	7 04	360	2 34	304	15
314	314	314	313	315	317	317	317	316	324	5 16	3.3	11 32	306	16
306	305	305	306	308	310	311	315	314	318	6 38	342	16 10	313	17
317	316	315	316	317	317	317	315	317	327	6 28	363	16 18	314	18†
319	314	314	315	319	321	319	319	321	333	6 43	384	15 58	311	19†
317	315	326	330	332	334	334	322	309	332	5 58	365	23 09	305	20
281	290	291	289	289	293	316	307	306	317	6 50	376	13 06	256	21
311	308	305	305	304	304	307	299	297	311	6 45	338	2 20	291	22
300	300	299	294	295	299	297	293	299	307	5 58	336	6 34	289	23
292	294	296	293	294	299	3 0	300	301	301	5 42	323	13 26	289	24
299	300	30	301	299	297	291	303	309	305	5 56	333	20 06	283	25
297	301	300	301	304	303	303	303	307	313	5 15	341	14 04	287	26
306	305	304	305	299	300	305	306	303	316	7 46	347	19 06	296	27
309	306	303	302	305	314	309	311	311	314	6 20	343	17 26	299	28
308	303	304	303	307	307	304	306	303	313	6 21	335	15 14	300	29
319	310	309	30	310	313	311	312	315	319	6 22	346	14 10	308	30†
305	305	304	305	308	308	309	312	316	321	6 58	358	13 54	280	31
308	306	306	306	308	309	309	310	311	318					Mean.
315	313	312	310	314	315	314	314	316	325					Mean.†

APRIL

309	312	294	289	302	306	309	312	307	324	6 31	364	18 40	285	1
318	317	319	316	316	316	321	323	324	321	6 04	342	1 02	303	2
309	296	287	286	277	276	282	291	298	319	5 50	365	20 44	271	3
301	312	303	313	308	302	301	302	299	312	7 38	338	1 06	293	4
311	312	309	309	310	310	311	311	312	316	6 34	312	2 06	290	5
307	309	312	314	314	314	314	315	315	324	6 30	365	13 58	305	6†
320	319	320	322	3 0	320	317	318	317	330	6 29	368	21 30	312	7
319	318	321	321	321	319	323	322	320	323	6 06	371	15 58	317	8
315	309	315	321	327	329	325	328	337	330	7 06	363	15 39	306	9
295	301	304	308	310	302	296	301	307	317	7 02	358	13 30	290	10
294	299	304	303	299	306	303	303	304	313	6 18	360	14 10	283	11
303	303	304	305	306	306	306	308	307	313	6 0	338	15 30	302	12†
311	307	308	309	310	310	311	312	313	321	5 58	353	15 42	307	13†
317	313	311	312	315	317	312	314	318	328	6 02	361	17 11	308	14†
319	318	313	319	303	302	305	309	313	328	5 39	363	19 13	300	15
319	326	321	326	326	327	329	331	333	331	6 28	358	14 38	316	16
320	320	322	320	322	324	320	321	324	334	5 32	373	13 38	315	17
294	297	301	301	309	306	310	305	308	317	8 30	354	14 18	289	18
329	304	299	286	283	311	305	294	288	317	5 56	353	18 42	276	19
281	288	293	295	295	297	2 9	301	304	294	6 32	325	10 34	235	20
316	313	312	311	312	311	314	315	315	325	6 50	358	20 18	309	21
302	302	296	2 3	298	296	300	305	305	315	6 14	349	18 14	291	22
307	312	30	302	306	307	308	311	311	318	6 30	349	17 18	297	23
310	311	311	312	313	314	315	315	315	323	6 06	355	14 58	310	24
317	316	313	307	304	311	315	317	315	327	6 18	364	19 30	303	25
311	314	315	316	316	316	312	309	311	321	5 44	348	20 50	308	26
311	313	312	310	313	313	315	315	316	324	5 32	358	14 58	311	27
322	324	324	320	320	322	324	328	324	333	7 02	355	17 54	317	28
314	313	313	315	317	317	318	319	322	330	6 34	361	16 30	312	29†
317	316	317	318	316	316	315	316	319	335	7 17	383	18 52	312	30
311	309	309	309	309	311	311	312	313	322					Mean.
310	309	309	310	312	312	311	313	314	323					Mean.†

*See footnote on page 101.

†Five international quiet days.

MAY.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)
37000γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	316	320	325	334	349	361	366	366	365	358	347	333	329	329	326
2	329	324	320	330	336	353	344	337	331	325	328	327	324	321	321
3	323	323	325	331	337	348	349	342	337	326	321	318	312	310	315
4	319	319	324	331	340	341	340	337	334	336	326	327	321	316	314
5	323	319	319	322	330	343	348	346	345	339	326	314	303	304	303
6	317	318	325	339	354	369	380	378	354	338	323	288	293	304	301
7	314	324	333	327	324	324	316	315	320	318	312	278	281	285	273
8	298	297	298	309	319	324	328	330	329	320	311	302	300	299	301
9†	306	309	321	330	343	350	350	343	337	332	327	322	316	312	311
10†	312	315	320	327	337	345	348	346	341	334	328	323	321	319	318
11	326	329	335	344	354	361	361	358	349	339	332	324	326	327	321
12	304	305	307	304	311	318	317	316	316	307	303	296	302	301	303
13	311	313	319	325	332	341	340	332	325	320	318	321	318	315	315
14	311	311	312	322	329	330	337	342	339	331	322	322	317	313	315
15	306	299	296	295	293	287	304	312	297	303	307	303	291	285	291
16	304	303	308	305	317	322	317	306	308	313	313	308	307	302	300
17	303	302	299	309	322	339	351	351	344	339	331	319	313	311	310
18	310	315	313	329	339	341	335	330	327	328	324	313	303	295	292
19	302	304	309	311	316	319	319	319	314	313	309	309	308	308	309
20	320	322	323	326	328	335	341	342	336	331	331	326	319	315	316
21	309	317	322	326	328	331	334	332	333	330	329	327	321	318	319
22†	320	321	326	330	336	349	360	359	355	345	336	325	322	319	313
23†	323	323	327	333	338	343	351	352	354	351	344	333	328	325	323
24	334	334	337	343	353	359	363	360	359	355	345	340	334	327	326
25	331	332	336	343	355	368	376	370	360	348	338	332	331	332	331
26	344	349	347	355	363	364	371	358	343	330	318	311	307	304	303
27	314	315	323	330	338	343	346	341	332	327	321	314	312	308	310
28†	313	313	314	320	328	339	345	346	348	347	336	323	317	314	316
29	321	322	325	335	341	352	358	354	357	351	346	340	333	324	314
30	320	321	328	339	351	356	361	367	369	365	352	337	329	328	325
31	328	330	336	344	350	356	376	371	375	372	359	348	340	333	333
Mean .	317	318	321	327	335	342	346	344	340	335	328	320	315	313	312
Mean† .	319	320	325	331	339	348	353	351	349	343	335	326	321	317	315

JUNE.

1	397	337	334	335	343	353	361	365	358	352	347	340	332	326	327
2	309	315	323	326	336	324	325	335	338	304	281	270	268	271	276
3	295	302	309	314	321	317	322	329	330	328	319	311	307	308	309
4	309	310	317	324	331	338	337	335	328	322	317	308	308	310	313
5†	314	316	324	333	344	352	357	354	351	344	333	324	321	316	320
6	323	330	342	353	364	365	370	371	361	346	335	326	321	316	311
7	319	320	325	332	338	346	360	361	361	356	342	329	321	311	309
8	316	316	319	330	341	349	353	349	339	332	331	329	322	319	320
9	313	306	295	295	279	281	279	277	283	284	279	278	275	279	273
10	303	301	305	310	317	323	317	300	297	289	297	299	303	305	305
11	315	314	309	317	315	316	321	319	321	322	317	309	306	305	304
12	318	318	317	313	321	337	347	354	346	324	310	311	310	299	294
13	304	305	311	317	319	328	332	338	341	338	331	323	315	303	303
14	312	313	321	329	329	340	345	345	351	347	336	327	323	315	315
15†	314	319	323	327	330	338	346	350	353	348	334	326	319	316	318
16†	321	320	325	330	337	344	350	350	349	349	344	340	314	324	322
17†	329	330	335	342	353	362	365	362	360	356	350	341	333	328	329
18	331	329	336	345	352	360	367	362	353	347	337	330	323	321	320
19	325	330	336	340	344	354	360	364	365	356	347	338	329	321	320
20	325	327	329	336	341	348	353	352	346	342	336	331	326	323	323
21	326	327	330	344	342	351	353	347	345	344	340	332	327	321	321
22	336	338	343	349	355	360	372	363	355	349	336	323	316	314	314
23	325	328	331	340	344	350	351	353	350	342	333	323	319	320	321
24	327	327	330	336	347	359	363	363	363	357	341	324	317	317	318
25†	329	334	339	341	341	347	355	355	356	347	343	335	332	329	328
26	332	333	337	341	348	357	369	369	368	357	344	338	331	329	328
27	315	315	323	329	334	340	339	341	333	328	315	305	298	309	307
28	317	321	330	334	327	343	349	351	341	330	309	300	309	308	310
29	313	315	327	334	333	341	342	345	336	333	323	315	314	317	317
30	316	315	318	333	350	361	357	352	349	335	325	319	318	320	319
Mean .	319	321	325	331	336	343	347	347	344	337	328	320	315	313	313
Mean† .	324	326	331	337	343	350	356	355	355	350	341	333	323	322	323

†Five international quiet days.

MAY.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)
37000γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
325	325	325	326	327	326	327	327	326	336	6 30	369	0 10	311	1
317	318	320	323	324	324	322	322	322	327	5 00	358	15 14	317	2
316	315	315	314	313	313	313	312	314	323	5 30	352	12 32	309	3
313	313	314	315	315	315	316	321	321	324	4 06	344	15 22	310	4
303	304	308	308	307	317	317	317	316	320	6 18	351	12 06	297	5
304	304	293	304	305	305	305	309	309	321	6 42	**386**	11 10	282	6
271	282	280	283	284	290	296	295	296	301	4 53	342	14 10	**266**	7
299	299	298	301	304	305	306	306	305	308	7 42	333	2 06	294	8
310	309	310	311	312	312	313	312	313	321	5 06	353	1 01	304	9†
317	317	318	320	321	321	322	325	325	326	5 08	349	1 01	312	10†
315	320	322	307	294	291	294	313	306	327	5 38	363	19 42	286	11
304	304	305	306	305	305	306	311	310	307	5 44	322	11 10	293	12
315	316	319	315	304	299	319	309	310	319	5 30	344	19 10	293	13
318	319	321	317	318	310	306	317	305	320	6 30	343	23 30	302	14
297	299	299	295	309	310	304	302	303	**299**	19 19	323	5 02	280	15
292	297	301	303	301	304	303	302	301	306	4 51	325	14 58	292	16
306	304	309	308	309	316	312	312	313	318	6 12	354	1 50	298	17
292	295	297	301	304	301	299	300	300	312	4 32	343	10 32	292	18
309	311	312	314	315	316	318	319	320	313	6 30	320	0 10	302	19
314	314	309	304	298	304	307	307	313	320	7 06	346	19 10	294	20
318	319	320	322	321	321	320	320	320	323	6 10	337	0 2	308	21
314	314	316	318	319	320	320	320	322	328	6 30	361	13 38	313	22†
323	325	325	326	330	328	327	331	333	333	7 46	356	16 30	322	23†
326	326	328	327	328	330	330	330	331	338	6 18	366	13 29	325	24
327	321	314	309	310	320	328	328	336	337	5 58	376	18 22	308	25
309	313	302	310	314	312	312	314	314	327	5 58	375	17 06	298	26
310	310	311	311	313	313	312	313	313	320	5 58	352	12 30	308	27
317	319	319	320	320	320	321	321	322	325	8 22	350	0 54	312	28†
302	310	316	318	319	318	317	318	319	330	5 58	360	15 22	298	29
322	321	323	321	323	326	326	327	327	336	7 50	370	15 30	321	30
329	329	327	326	326	329	331	333	335	**342**	8 30	376	17 50	326	31
311	312	312	313	313	313	315	316	316	322					Mean.
315	315	316	317	318	317	317	318	319	327					Mean.†

JUNE.

329	345	348	339	329	328	322	326	313	338	6 50	367	23 26	298	1
277	285	286	279	290	296	298	290	290	299	7 50	350	11 50	**255**	2
308	307	309	312	313	311	309	308	308	313	8 48	335	0 46	294	3
312	312	313	313	312	315	315	314	315	318	5 03	339	11 42	306	4
320	322	322	321	320	323	326	324	324	329	5 46	359	13 17	316	5†
315	314	312	317	320	315	314	315	316	332	6 50	375	14 06	309	6
307	310	313	312	312	315	316	319	316	327	8 34	364	13 26	307	7
317	316	317	317	313	317	313	313	321	325	6 02	356	21 54	308	8
279	280	278	281	283	285	287	291	299	**284**	0 30	314	13 10	270	9
297	303	304	303	305	309	309	313	312	305	5 22	337	9 14	287	10
300	301	306	309	312	312	313	311	315	312	8 26	327	15 14	298	11
307	300	297	297	307	301	299	301	303	313	6 42	361	13 46	291	12
305	305	307	309	312	310	316	314	311	317	7 44	344	13 38	302	13
316	314	312	310	314	315	310	311	311	323	8 16	356	20 50	311	14
320	320	318	317	317	317	317	316	316	326	8 11	356	12 42	315	15†
322	323	323	324	325	326	326	324	325	331	6 30	353	14 02	313	16†
330	329	331	333	333	333	331	331	331	340	5 58	368	13 04	328	17†
321	321	322	323	322	321	321	321	322	334	5 30	370	12 50	320	18
321	320	321	321	323	323	326	326	324	335	7 34	369	13 42	319	19
320	318	319	323	324	325	325	327	327	331	5 34	357	15 40	318	20
327	327	320	339	332	332	333	332	334	335	5 30	356	12 54	321	21
316	323	320	320	323	327	324	319	321	334	6 14	**377**	11 44	313	22
321	320	323	323	325	325	325	323	323	331	6 45	363	12 06	319	23
317	317	319	319	323	321	321	329	327	333	7 22	367	11 56	316	24
327	327	327	329	329	329	329	330	332	336	5 34	359	14 30	326	25†
345	355	350	348	346	360	347	323	317	**344**	6 38	373	23 10	314	26
308	296	317	310	310	317	317	315	317	318	7 08	345	15 54	287	27
304	311	314	318	318	316	315	309	332	321	6 46	355	10 38	296	28
316	317	318	318	345	316	316	316	318	323	6 42	348	10 46	313	29
319	319	321	321	320	320	320	320	319	328	5 16	365	11 54	317	30
314	315	317	317	318	319	318	317	318	325					Mean.
323	323	323	323	323	324	324	323	323	333					Mean.†

*See footnote on page 101.
†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

JULY. 37000γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	321	324	323	326	334	341	343	345	340	334	331	326	322	322	323
2	327	332	340	349	365	384	388	381	375	365	351	342	336	331	316
3	318	315	320	335	349	359	362	355	337	316	346	338	334	315	321
4	324	327	331	337	343	348	350	354	355	349	338	333	326	324	323
5	322	323	327	336	340	353	360	367	369	362	351	335	325	321	320
6	327	326	327	337	351	369	376	379	377	370	351	337	327	315	319
7	321	322	326	337	352	368	369	361	355	347	336	329	328	328	318
8	312	328	337	347	363	378	377	371	365	360	349	331	323	321	323
9†	326	328	335	347	311	36	362	362	359	353	343	333	331	332	333
10†	319	330	337	341	342	352	357	357	360	356	347	335	329	330	331
11	338	345	347	356	364	369	363	361	356	357	337	327	321	318	318
12	327	331	344	354	365	366	378	383	378	372	361	348	335	333	327
13	339	337	340	346	353	350	343	330	341	338	330	325	327	327	326
14	333	331	333	339	343	354	357	360	361	349	325	311	315	328	329
15	325	325	324	329	332	344	356	368	347	332	335	326	325	315	313
16	322	320	321	326	332	339	342	341	340	333	324	319	315	316	317
17	321	323	323	332	330	349	353	350	344	337	329	325	323	323	320
18	331	331	339	341	349	363	370	363	349	339	325	319	318	318	317
19†	324	329	333	337	342	350	355	351	349	345	333	325	320	320	321
20†	325	325	327	331	335	342	358	357	340	347	341	333	329	327	325
21†	331	334	341	347	356	367	364	379	356	353	341	328	322	321	321
22	330	328	330	334	336	348	357	364	364	357	346	336	331	325	324
23	329	329	332	344	371	389	409	402	389	384	347	312	312	312	322
24	292	303	311	311	318	326	328	327	321	304	296	313	315	310	303
25	312	315	313	318	330	335	334	310	352	337	313	295	298	274	276
26	315	313	306	313	301	317	329	328	325	329	327	318	313	294	295
27	309	309	307	309	310	318	330	337	336	336	331	320	313	317	313
28	327	332	341	339	328	337	360	347	344	337	327	309	291	303	302
29	305	303	310	313	312	321	319	324	332	332	310	328	326	323	317
30	312	309	317	319	325	334	338	338	332	327	327	321	319	317	317
31	309	307	307	312	326	347	363	366	379	346	336	329	323	322	318
Mean . .	323	324	328	333	340	351	356	356	353	347	336	326	322	319	318
Mean† . .	329	331	336	342	346	357	360	358	355	351	341	331	326	326	326

AUGUST.

1	321	323	320	330	335	349	357	354	351	350	344	334	326	321	314
2†	315	313	308	311	318	332	343	353	355	349	337	323	323	321	319
3	327	331	312	41	335	344	341	336	337	338	333	322	317	315	313
4	320	311	324	331	345	359	368	358	345	342	340	331	325	324	319
5	321	322	321	319	326	333	341	345	348	351	345	341	336	331	327
6	311	315	324	331	330	342	346	343	347	346	337	325	324	319	318
7	336	334	317	342	352	371	359	356	353	345	330	312	309	305	295
8	317	313	319	319	330	331	343	343	339	326	329	304	292	291	297
9	316	317	305	300	311	321	315	317	319	330	325	312	300	305	297
10	301	312	314	319	328	337	350	351	347	348	343	330	316	310	308
11	317	328	324	324	313	314	310	316	327	326	329	309	302	307	302
12†	314	315	317	317	323	327	330	335	338	337	323	316	315	313	312
13	318	318	315	314	320	332	346	351	348	342	338	330	326	321	325
14	322	321	321	324	326	326	340	345	341	329	322	312	304	309	312
15	318	318	319	317	322	341	359	366	357	352	341	331	325	320	316
16	316	317	317	317	321	333	339	342	343	348	344	331	304	302	318
17†	317	314	311	314	323	339	343	342	338	326	318	310	307	300	309
18†	319	318	319	319	325	339	350	349	359	351	341	334	329	325	321
19	328	326	337	336	332	333	338	350	351	348	334	308	302	306	317
20	329	333	332	327	333	337	320	305	316	314	301	287	296	319	296
21	313	314	312	307	302	293	308	306	313	328	317	299	295	302	294
22	314	313	312	316	324	332	334	337	334	334	333	331	325	316	312
23	316	315	312	317	333	349	354	357	349	333	326	324	317	309	308
24	326	328	326	327	334	344	350	346	343	343	345	336	332	335	331
25	316	313	314	303	301	311	334	331	316	320	315	301	296	287	202
26	312	311	311	317	329	313	355	363	353	334	324	316	309	311	311
27	317	312	305	303	314	327	328	327	324	321	323	319	318	318	307
28	327	325	303	302	313	330	343	315	324	304	309	309	301	305	308
29	313	312	306	306	310	308	316	336	342	337	330	325	320	318	317
30†	313	313	310	306	313	329	343	348	340	347	344	341	334	328	323
31	323	323	316	322	338	351	356	361	361	355	348	340	334	327	325
Mean . .	319	319	318	319	325	334	341	343	341	337	331	321	315	314	312
Mean† . .	319	318	315	316	322	335	344	347	349	343	333	326	321	319	316

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

JULY. 37000γ PLUS TABULAR QUANTITIES

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
324	325	324	325	327	328	328	328	331	329	6 33	349	14 16	320	1
323	325	327	327	332	324	315	317	324	341	6 04	397	21 47	307	2
319	318	317	313	318	321	328	321	321	332	5 57	366	17 40	313	3
324	323	321	323	325	335	337	327	323	333	7 57	359	16 42	321	4
319	320	320	324	327	328	325	329	329	335	7 20	370	15 4	319	5
319	322	325	329	325	323	321	320	321	337	7 12	382	14 20	318	6
327	330	333	332	329	324	320	323	324	335	5 34	375	21 4	318	7
323	325	327	329	330	333	327	326	326	339	5 13	383	13 26	321	8
330	330	331	332	332	330	328	326	325	338	5 28	366	22 52	325	9†
331	331	331	331	332	332	331	333	337	339	8 04	363	0 38	329	10‡
315	318	322	3 9	322	319	325	324	323	336	5 20	375	15 03	315	11
325	330	338	338	339	337	341	340	341	348	7 10	387	14 01	321	12
327	323	324	326	326	334	338	333	334	334	4 00	356	11 17	322	13
323	323	317	315	327	324	323	322	323	332	7 38	367	11 30	309	14
314	312	312	315	317	319	317	317	321	327	7 09	373	13 22	312	15
316	317	318	318	320	321	323	323	320	324	6 56	346	12 26	313	16
319	320	319	320	323	324	325	325	327	329	6 08	358	15 30	319	17
317	317	319	320	321	323	321	323	324	331	6 04	375	15 06	315	18
322	323	325	324	325	326	326	325	326	331	5 50	357	12 15	319	19†
324	325	327	329	328	329	329	330	327	334	6 12	361	15 54	323	20†
319	320	324	324	323	323	328	330	331	336	4 42	370	16 20	318	21†
325	325	326	324	328	329	329	327	329	333	7 55	368	14 00	324	22
316	298	281	278	283	309	295	298	299	330	6 16	**415**	17 37	269	23
304	300	307	310	311	309	310	312	315	311	6 44	331	9 46	284	24
279	278	287	295	297	303	314	311	305	**309**	7 50	355	13 26	**260**	25
303	307	308	304	304	315	312	309	307	313	9 21	335	13 03	291	26
313	314	315	318	319	316	316	315	322	319	7 23	340	2 11	307	27
295	296	305	303	307	307	306	307	309	319	5 43	365	11 40	287	28
320	318	315	315	316	317	315	319	319	319	8 18	336	0 00	304	29
315	316	317	317	317	317	319	319	313	321	6 43	342	0 58	307	30
317	318	320	320	319	319	319	319	321	327	7 03	368	1 00	306	31
318	**318**	319	320	321	323	322	322	323	330					Mean.
325	325	327	327	327	327	327	327	327	336					Mean.†

AUGUST.

314	316	317	321	317	315	318	317	316	328	5 56	360	20 39	312	1
321	320	320	321	3 2	322	324	323	321	326	7 34	359	2 16	308	2†
311	311	312	313	314	316	317	3 7	319	3 5	5 15	352	14 52	308	3
320	321	322	321	319	319	317	319	318	**330**	6 03	371	19 30	317	4
317	320	316	309	3 3	308	307	304	309	325	8 58	3 5	22 04	301	5
320	323	324	3 4	321	319	324	327	332	329	7 58	350	0 0	311	6
298	294	295	301	306	311	314	318	324	325	4 49	**380**	14 07	285	7
307	305	304	305	308	323	30	315	31	316	6 24	352	12 57	290	8
297	303	299	301	304	308	323	312	309	310	9 18	335	14 19	293	9
3 8	306	308	312	311	313	315	319	319	322	7 15	356	17 0	306	10
301	301	307	309	307	310	311	311	313	313	8 30	335	15 30	301	11
309	309	314	313	313	318	318	315	317	319	8 50	344	15 40	307	12†
319	308	313	316	315	3 2	320	320	321	325	6 44	355	16 0	307	13
311	313	314	314	314	317	319	317	317	320	6 41	3 0	12 25	304	14
316	316	325	327	323	322	329	324	321	329	6 48	369	15 42	315	15
320	314	303	300	306	306	311	308	321	320	9 16	355	12 36	294	16
310	311	311	312	314	316	3 0	321	3 0	319	5 48	347	12 08	307	17†
322	322	320	317	320	3 4	324	327	329	329	8 10	364	17 53	317	18†
320	325	326	319	322	330	323	327	328	328	7 20	354	12 02	302	19
294	305	299	303	315	316	307	311	314	313	4 26	343	11 20	278	20
287	302	312	311	309	310	313	318	318	308	9 0	331	14 34	281	21
312	311	318	319	317	315	316	316	314	321	7 12	341	16 30	311	22
306	311	315	316	319	319	322	322	321	324	6 46	360	15 02	306	23
329	324	326	327	323	320	316	306	305	330	5 59	354	23 16	293	24
289	297	299	303	313	307	303	312	313	**308**	6 42	345	13 08	282	25
314	316	311	311	316	321	315	315	321	322	7 09	366	11 57	305	26
316	317	312	319	321	317	319	329	328	319	22 28	337	2 45	300	27
307	308	306	307	309	312	312	314	313	314	6 39	349	12 20	297	28
314	313	313	315	315	321	315	313	313	318	7 59	346	3 10	306	29
320	319	321	323	325	323	325	325	324	327	8 30	353	2 37	306	30†
323	322	322	322	321	317	320	319	317	332	6 43	365	20 22	314	31
311	312	313	314	315	317	317	317	318	322					Mean.
315	**315**	316	315	317	319	319	319	319	324					Mean.†

*See footnote on page 101.
†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

SEPTEMBER. 37000 γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.).														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	321	319	323	333	343	362	379	381	363	340	336	331	324	321	318
2†	327	323	317	313	315	327	336	344	349	343	337	333	332	333	331
3	331	330	330	337	352	375	393	398	395	385	349	343	344	337	329
4	328	325	322	299	301	321	307	306	325	319	300	279	266	263	293
5	299	304	307	304	303	317	325	338	334	320	318	318	311	312	311
6	314	312	306	298	304	319	332	336	316	293	288	291	265	261	276
7	303	308	305	299	316	328	340	343	325	349	343	328	309	305	304
8	310	312	312	317	325	333	338	350	348	338	333	316	312	306	298
9	302	310	309	306	307	304	310	311	304	304	311	309	304	294	284
10	304	307	305	304	302	311	320	331	329	317	309	301	295	290	292
11	308	311	306	304	305	308	309	313	312	308	302	296	308	304	303
12	314	315	309	303	309	319	322	326	329	326	316	316	322	316	295
13	314	312	309	311	315	319	323	321	321	319	317	318	325	323	316
14	321	321	316	310	314	327	340	343	341	345	337	325	316	313	309
15	315	312	304	307	326	343	363	363	347	322	290	290	282	280	263
16	309	307	312	309	306	317	323	320	312	307	313	319	308	307	301
17	317	306	299	296	284	291	308	305	303	294	288	289	289	289	297
18†	306	309	310	312	321	338	343	346	347	343	330	318	318	314	313
19†	318	318	316	321	331	343	349	352	347	335	321	317	316	316	316
20	319	324	327	340	354	364	372	374	368	357	340	334	332	335	335
21	290	301	309	305	312	332	336	324	329	326	326	313	299	309	314
22	318	311	301	291	303	309	323	331	331	325	318	316	315	315	315
23	319	318	323	327	333	355	361	360	352	345	339	333	325	322	312
24	332	333	325	322	329	337	349	341	328	330	327	322	310	301	300
25	319	321	324	326	336	352	358	356	351	349	342	334	323	314	321
26	325	327	329	335	343	350	358	360	355	338	333	328	324	321	321
27	325	321	337	339	357	363	367	366	363	350	340	334	326	323	324
28†	325	326	327	334	346	355	362	361	360	355	349	345	340	336	334
29†	332	331	326	327	337	351	358	361	361	359	355	340	338	342	336
30	354	355	352	354	358	361	366	369	373	369	352	332	306	296	258
Mean . .	317	318	317	316	323	334	342	344	341	334	325	319	313	310	307
Mean† . .	326	325	323	326	333	346	352	355	354	348	339	331	329	328	325

OCTOBER.

1	341	331	315	324	341	351	360	338	332	339	327	321	313	306	298
2	334	333	316	316	322	337	352	361	362	354	317	294	307	310	288
3	311	302	307	308	319	322	330	329	320	320	321	317	313	318	312
4	328	319	327	327	333	343	359	367	361	346	334	330	317	305	300
5	314	321	327	329	325	317	313	313	287	282	308	300	277	274	290
6	313	318	313	306	318	334	345	348	340	318	307	297	308	311	314
7	325	324	320	318	325	335	345	352	341	333	324	319	315	311	314
8	323	325	327	332	341	349	351	346	329	325	325	324	323	324	327
9†	327	327	329	331	340	348	355	357	350	340	335	333	331	324	316
10†	333	333	338	346	357	361	362	360	350	341	340	335	325	331	337
11†	333	331	324	328	342	361	369	369	359	347	340	334	331	328	326
12	337	334	331	333	345	361	363	362	355	344	324	320	331	335	319
13	313	295	290	302	302	304	308	307	288	289	288	284	292	286	295
14	310	308	309	311	312	316	329	342	340	331	320	309	306	303	305
15	319	322	324	332	337	355	364	358	334	321	315	314	307	293	300
16†	328	325	328	336	345	352	357	356	346	339	334	325	315	308	305
17	327	337	348	364	402	385	372	368	356	341	336	327	318	328	330
18	327	328	341	351	361	371	374	371	363	352	340	325	297	309	312
19	321	325	323	320	328	337	334	339	336	317	323	317	330	331	328
20	322	327	325	349	361	368	377	366	361	354	343	334	320	324	320
21	337	337	343	349	359	368	376	369	355	344	330	330	322	320	323
22	330	326	323	331	336	343	351	348	344	329	328	327	325	327	327
23	334	333	334	340	349	354	354	351	341	338	338	329	329	332	327
24	324	327	325	332	335	338	340	340	332	315	316	325	329	325	321
25†	330	329	337	349	364	375	381	377	369	359	351	346	337	333	330
26	333	331	343	357	367	378	381	372	357	346	345	342	343	337	337
27	332	338	350	362	367	372	378	375	365	348	336	329	311	302	302
28	321	327	332	330	344	356	360	355	346	331	314	325	325	308	318
29	305	311	318	328	337	345	350	346	332	315	267	221	160	146	117
30	271	280	293	303	300	293	299	267	276	275	248	262	277	272	254
31	290	294	298	300	311	305	308	301	285	290	296	300	289	295	298
Mean . .	322	323	325	331	339	346	351	340	339	330	322	316	311	309	306
Mean† . .	331	330	332	339	350	360	366	365	355	345	340	335	328	325	322

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

SEPTEMBER. 37000γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.).									*Mean.	Maximum.			Minimum.			Date.
15	16	17	18	19	20	21	22	23		Time.		Mag.	Time.		Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H.	M.	γ	H.	M.	γ	
316	313	314	314	313	319	317	316	325	331	6	54	389	19	03	312	1
330	328	328	329	328	328	329	329	328	330	8	03	350	3	39	313	2†
312	304	303	310	319	320	323	323	328	340	8	30	**403**	15	40	299	3
285	286	305	307	294	296	299	298	298	300	5	11	333	13	16	256	4
317	310	309	313	312	315	313	310	310	314	6	50	342	3	46	297	5
282	290	303	297	300	297	308	317	306	300	7	8	339	12	40	246	6
301	295	300	309	315	307	307	306	307	315	9	24	352	2	52	291	7
298	297	305	303	292	293	308	317	301	315	7	11	352	20	6	290	8
284	295	293	304	297	293	303	310	303	302	3	41	314	14	46	278	9
292	290	301	314	304	302	305	307	305	306	7	20	334	15	57	287	10
306	306	310	313	315	312	317	318	317	309	21	30	322	10	39	289	11
294	305	309	309	316	315	311	311	314	313	8	6	335	14	23	289	12
314	314	311	319	320	322	320	317	318	317	12	49	329	17	12	307	13
310	309	305	309	309	305	314	330	322	320	8	50	348	16	08	294	14
254	260	265	274	307	294	297	310	312	303	6	12	367	15	09	251	15
291	299	303	304	306	308	308	319	328	310	23	12	331	15	19	287	16
300	301	301	308	312	312	307	305	304	**300**	6	30	319	11	13	278	17
315	316	314	314	311	308	310	311	314	320	8	28	349	20	02	306	18†
316	317	317	314	315	315	317	319	320	323	7	11	355	19	47	311	19†
324	324	331	325	315	286	297	306	302	333	6	50	376	20	6	279	20
316	313	312	312	315	313	311	311	316	315	5	50	343	0	00	286	21
319	318	320	321	315	309	320	319	317	316	6	40	334	2	56	291	22
303	312	316	317	318	318	321	321	322	329	6	20	366	14	52	290	23
319	322	317	317	320	319	321	320	319	323	5	50	352	14	22	297	24
321	321	323	324	319	322	316	319	329	330	6	16	363	13	24	313	25
321	318	318	321	324	324	320	321	322	331	6	56	363	18	49	315	26
322	321	322	323	331	326	325	326	325	336	6	04	371	0	56	318	27
334	331	330	327	329	334	333	332	330	339	5	55	365	1	18	325	28†
333	332	331	333	340	347	349	353	356	**343**	7	22	364	2	17	325	29†
252	286	300	310	307	314	316	316	325	328	8	10	**376**	14	46	**245**	30
306	308	311	313	314	313	315	317	317	320							Mean.
325	323	322	**321**	322	323	324	325	325	331							Mean.†

OCTOBER.

298	311	316	325	327	318	316	319	323	325	5	59	366	14	06	295	1
269	316	286	285	313	290	301	308	308	316	7	32	367	15	01	263	2
311	319	321	318	321	322	322	323	326	318	6	30	333	1	22	298	3
307	314	306	296	291	295	299	313	313	322	6	44	360	19	03	286	4
303	309	312	308	296	307	308	303	302	305	2	41	339	8	46	273	5
313	312	310	315	322	317	317	317	320	318	7	21	351	11	16	297	6
316	316	328	323	324	324	325	323	323	325	6	42	354	12	41	310	7
327	326	328	327	325	327	323	333	327	330	5	48	353	21	04	320	8
318	323	323	326	327	327	327	329	331	332	6	40	359	14	30	314	9†
337	338	331	328	331	333	332	339	336	339	5	30	363	11	44	325	10†
328	334	338	340	343	344	343	339	339	341	6	37	373	1	57	324	11†
300	293	276	295	289	298	289	293	313	322	6	30	364	16	53	273	12
316	302	305	307	308	310	311	312	313	301	14	50	324	13	20	279	13
309	312	329	318	317	319	317	314	316	317	7	05	345	15	41	301	14
305	308	321	332	322	321	320	319	326	324	6	12	367	13	16	286	15
304	306	311	318	321	324	327	329	329	328	6	35	359	14	09	303	16†
333	333	333	335	335	335	346	321	324	343	4	16	**417**	12	11	310	17
320	310	306	305	311	319	314	316	316	331	6	27	381	11	36	290	18
318	319	325	322	320	335	327	320	324	326	20	08	344	11	20	308	19
327	329	329	327	331	339	334	331	332	340	6	10	380	13	36	319	20
326	327	325	323	339	337	333	331	332	339	6	10	377	11	56	315	21
331	329	325	323	334	329	327	332	332	332	5	50	355	17	43	309	22
329	325	339	343	336	349	336	346	341	338	5	49	358	23	58	321	23
320	321	322	327	329	328	328	329	329	327	6	16	345	9	37	309	24
332	330	326	328	329	332	332	335	339	344	4	22	384	14	58	325	25†
335	337	339	331	325	336	325	331	333	**344**	5	14	384	19	14	319	26
303	286	278	280	303	306	312	316	319	328	6	16	381	18	00	266	27
318	301	310	297	290	274	287	298	298	319	5	54	363	20	06	266	28
102	194	188	189	209	243	266	275	271	**255**	6	38	350	14	37	**097**	29
253	248	252	271	307	285	284	295	291	278	19	03	323	10	00	230	30
309	307	312	320	315	311	308	314	313	303	17	42	321	8	18	281	31
307	311	311	312	316	317	317	319	321	323							Mean.
324	326	325	327	330	331	331	333	334	337							Mean.†

*See footnote on page 101.

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

NOVEMBER. 37000γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	312	311	310	313	318	321	329	334	326	312	312	312	317	316	319
2	327	328	330	335	342	348	356	348	341	334	327	319	319	317	313
3	330	329	337	347	355	360	360	357	350	332	320	318	317	3 9	300
4	325	336	341	350	352	350	346	337	336	317	285	269	280	291	297
5	323	325	329	339	341	357	366	3.0	334	309	304	300	3.2	325	329
6	319	323	319	331	342	341	344	347	340	329	319	286	290	308	318
7	322	322	323	330	335	341	342	337	325	317	314	321	310	315	317
8	331	333	336	351	355	351	3.6	3:7	320	311	296	289	300	312	2 9
9	3:0	322	327	97	343	357	360	360	353	343	336	324	308	306	300
10	326	324	327	338	341	339	334	337	330	325	325	321	322	322	317
11	329	330	344	354	56	266	369	365	356	344	325	317	311	321	311
12†	3 3	335	340	349	356	364	369	365	359	353	346	339	336	334	335
13	351	361	368	389	397	398	401	396	387	380	385	353	347	341	334
14	337	341	347	354	360	374	379	376	369	354	341	341	317	303	308
15	330	334	34	35.	360	361	373	378	369	3 9	352	339	323	321	316
16	3 1	332	340	351	354	367	376	372	365	361	353	334	328	320	328
17	322	322	329	336	339	349	357	353	343	340	33	336	33.	336	327
18	339	34	337	337	33	345	335	328	323	317	323	325	322	31	298
19	328	334	340	3.5	352	353	353	3:1	346	337	331	331	333	333	326
20	3 5	329	330	339	353	363	361	351	347	341	334	334	330	328	33
21†	334	338	342	352	360	368	369	366	359	348	345	341	340	337	337
22†	340	343	351	360	368	377	380	375	366	357	349	342	339	336	337
23	344	34.	352	361	371	382	386	379	373	363	357	352	350	351	351
24	344	343	3 3	351	360	369	377	369	361	3 5	347	344	339	3.6	335
25	356	363	373	386	402	41.	402	392	377	362	354	349	345	340	335
26	370	3 7	370	385	398	411	406	399	384	377	367	367	324	269	234
27	326	335	329	335	337	355	357	337	331	336	336	335	327	32.	323
28†	345	336	342	349	351	363	362	357	349	343	337	324	319	313	310
29	342	345	352	3 9	367	366	370	365	357	347	345	344	343	3 6	332
30†	352	349	354	365	373	389	387	374	363	350	343	328	335	331	330
Mean . .	333	336	340	348	356	363	365	359	352	342	335	328	324	321	318
Mean† . .	341	342	348	357	363	374	375	369	360	351	344	337	334	330	329

DECEMBER.

1	343	346	351	357	364	364	372	366	359	353	351	347	338	311	303
2	329	331	341	351	355	354	359	358	349	340	340	322	304	309	311
3	335	340	344	342	341	339	350	348	348	329	324	321	325	312	314
4	330	335	337	342	342	346	343	350	333	326	331	321	315	313	323
5	328	334	345	349	355	359	352	357	354	339	324	319	319	310	298
6	333	334	339	340	337	345	347	346	343	341	337	331	317	312	296
7	340	340	341	341	347	356	360	355	349	337	327	321	319	322	327
8	339	341	345	352	357	359	359	354	353	349	344	342	344	341	339
9	348	351	357	364	367	370	370	365	355	346	346	344	343	345	339
10	342	350	365	381	391	395	390	381	350	345	325	308	318	327	330
11	341	342	347	354	362	368	369	366	360	350	330	337	344	360	354
12	326	325	330	343	351	361	363	356	348	342	335	328	301	316	324
13	337	336	338	338	342	347	353	353	351	348	346	344	341	339	325
14	338	337	342	247	350	360	365	365	359	351	346	343	341	340	339
15	337	337	341	348	355	359	359	355	345	342	337	336	336	339	330
16	335	336	3 9	344	347	352	359	363	361	360	355	318	345	317	341
17	341	342	348	347	353	354	359	358	361	358	354	351	347	341	342
18	339	344	346	347	349	351	355	361	361	360	360	356	353	352	351
19†	344	345	347	353	358	361	368	368	372	368	363	353	351	349	349
20†	347	349	352	359	365	371	382	382	377	371	364	359	353	349	348
21†	349	349	353	358	366	371	375	375	369	365	359	356	352	350	351
22	355	356	363	365	370	373	376	370	367	368	371	367	361	356	356
23	353	357	363	371	376	385	387	383	373	366	363	361	355	344	338
24	351	340	347	359	366	375	378	379	374	367	362	358	353	351	349
25	352	358	363	372	384	387	385	375	362	351	354	345	334	335	343
26†	338	342	340	356	357	359	361	359	355	363	352	352	348	348	347
27†	351	355	355	357	360	370	377	380	375	369	366	361	353	346	314
28	356	357	362	370	378	382	383	388	387	383	376	380	376	306	344
29	353	352	358	371	361	357	359	357	356	358	340	317	331	316	304
30	343	351	350	361	343	341	339	334	337	334	326	328	324	316	320
31	348	346	344	345	345	349	353	351	347	345	341	343	334	337	340
Mean . .	341	344	349	354	358	362	365	363	358	352	347	342	338	335	333
Mean† . .	348	351	354	359	363	368	375	374	371	366	361	357	351	348	347

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

NOVEMBER. 37000γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									*Mean.	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.		
319	313	318	317	315	317	321	319	330	318	7 06	335	2 32	308	1
299	293	302	309	311	319	321	319	326	324	6 11	357	15 38	290	2
294	305	316	328	321	323	328	328	323	329	5 19	362	15 06	291	3
295	303	307	311	320	319	319	320	322	**318**	4 13	358	11 42	266	4
321	318	303	294	311	310	329	315	314	322	5 55	368	16 53	290	5
323	319	340	326	317	323	325	325	323	324	7 00	349	11 44	280	6
322	328	336	330	327	334	333	336	330	327	6 03	345	11 54	307	7
317	316	313	329	331	324	328	322	317	322	4 26	359	10 36	279	8
297	317	320	319	322	329	331	329	331	327	6 34	363	14 26	288	9
323	326	324	331	323	330	328	327	328	327	4 36	347	9 50	313	10
311	327	329	319	322	323	327	329	333	334	5 24	372	12 11	308	11
333	331	333	335	338	342	343	344	347	345	6 22	370	16 10	329	12†
335	337	341	339	331	330	334	332	332	358	5 50	402	19 32	323	13
326	313	313	317	327	331	331	332	332	339	5 50	379	12 51	299	14
327	335	353	328	323	323	328	327	334	341	7 20	379	13 46	309	15
320	310	327	328	323	330	334	331	324	339	5 52	377	16 26	290	16
324	320	332	346	331	333	332	341	338	336	5 46	359	15 32	313	17
328	319	325	333	326	334	326	324	329	327	5 06	346	14 26	293	18
333	325	325	334	343	335	336	322	324	337	20 12	360	21 56	317	19
329	329	341	345	335	334	335	334	334	338	5 11	365	0 04	325	20
339	338	338	348	343	341	340	341	341	346	6 10	369	0 02	333	21†
340	340	339	343	343	345	346	344	343	350	5 57	382	13 34	331	22†
349	346	348	351	342	338	337	350	345	355	5 38	387	20 42	331	23
335	333	335	337	340	341	359	360	355	**349**	5 49	377	15 47	332	24
340	341	347	349	351	361	362	359	362	**364**	5 06	**417**	13 54	333	25
229	238	273	289	285	299	305	319	312	332	4 32	412	15 18	**217**	26
324	321	318	315	319	323	331	326	334	331	5 18	380	17 22	305	27
316	314	319	319	325	329	333	336	339	334	4 54	365	14 18	306	28†
327	322	335	333	335	337	335	335	336	345	6 06	371	15 42	319	29
333	335	337	341	342	346	345	343	340	350	5 10	391	14 14	327	30†
320	320	326	328	327	331	333	332	333	338					Mean.
332	331	332	336	337	339	340	339	340	345					Mean.†

DECEMBER.

288	293	303	312	320	332	334	330	328	336	6 24	375	14 30	285	1
330	317	321	331	337	351	350	328	331	335	6 06	361	11 50	299	2
340	336	326	339	338	316	341	333	328	335	6 00	354	13 25	305	3
313	314	309	331	327	321	337	341	332	330	6 56	353	13 00	302	4
311	310	322	327	326	325	335	343	342	**323**	4 42	361	14 06	291	5
320	335	328	326	336	335	332	333	336	332	5 30	351	13 50	293	6
332	329	322	335	328	332	337	340	339	336	5 50	361	11 54	314	7
336	336	338	341	339	341	340	340	341	345	5 16	360	15 30	334	8†
332	333	339	336	334	329	330	335	339	346	5 30	372	20 18	326	9
329	331	332	335	335	335	335	341	344	347	5 20	**403**	11 00	306	10
343	335	328	341	328	335	336	335	322	345	5 44	374	19 30	309	11
322	342	335	329	343	344	336	332	338	337	6 02	365	11 52	295	12
324	327	326	339	338	337	338	335	335	339	6 02	356	16 48	317	13
335	346	336	326	336	338	346	345	352	345	6 26	367	18 10	322	14
337	336	345	342	335	345	351	346	335	343	5 14	361	18 54	329	15
343	335	327	330	336	339	336	336	339	344	6 56	364	17 42	322	16
341	344	340	341	338	338	345	341	340	347	5 45	361	19 04	329	17
344	340	336	341	344	346	343	343	342	349	7 17	361	17 18	333	18
347	348	347	346	346	348	347	346	345	353	8 06	372	0 00	339	19†
349	349	348	349	348	350	350	351	349	357	6 10	383	0 00	344	20†
351	352	351	354	354	352	350	355	355	357	6 30	375	0 30	346	21†
361	359	355	352	355	355	354	353	355	**361**	5 40	377	21 48	348	22
319	295	292	299	315	320	327	323	326	345	6 10	387	16 30	287	23
347	345	345	345	345	345	347	349	352	355	6 20	381	0 00	329	24
343	341	335	317	346	329	331	334	337	350	4 55	389	18 30	311	25
348	348	346	344	344	343	343	346	351	350	5 50	362	0 00	338	26†
343	349	352	353	353	353	354	353	354	358	7 00	381	15 16	341	27†
339	329	311	289	299	322	327	329	335	353	6 40	389	18 30	**280**	28
295	311	311	322	328	333	337	340	344	338	3 20	375	15 10	287	29
322	321	326	333	335	340	343	350	348	336	3 18	363	13 26	307	30
338	330	338	331	345	352	343	337	342	343	6 40	355	15 52	320	31
333	333	331	333	337	339	341	340	341	345					Mean.
347	348	348	348	347	347	**347**	348	348	355					Mean.†

*See footnote on page 101.

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

JANUARY. 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	795	794	792	795	797	792	786	781	780	785	790	790	786	786	787
2	773	772	770	777	779	776	774	775	775	777	778	773	765	768	768
3†	762	761	760	765	768	761	755	753	755	759	759	758	759	762	764
4	761	761	761	765	768	774	767	769	773	773	778	781	781	783	784
5	800	803	803	809	812	809	813	814	812	814	815	819	818	817	817
6	817	819	819	824	819	817	814	809	807	810	815	815	812	813	812
7†	804	803	803	806	806	798	791	794	802	804	803	803	798	798	797
8†	786	786	787	787	771	760	756	761	771	779	782	779	775	775	775
9	773	776	777	781	768	745	745	749	758	764	769	772	770	773	773
10	772	767	768	769	763	761	760	764	776	784	789	787	781	779	782
11	785	788	789	793	793	778	768	775	797	793	794	796	795	796	796
12	795	797	800	804	795	790	788	784	789	792	802	807	806	805	806
13	802	802	803	804	789	770	763	771	785	799	809	811	807	807	807
14	801	801	803	805	801	791	784	791	807	811	808	811	807	805	804
15	790	788	793	801	785	755	749	765	780	783	787	791	789	788	787
16	777	776	781	785	779	779	778	780	783	789	785	779	780	777	779
17	773	774	774	785	783	772	773	779	780	784	780	782	778	782	782
18	772	771	772	771	772	773	775	779	783	784	783	785	781	781	785
19	785	786	789	793	792	785	786	791	798	797	796	793	791	790	792
20	786	789	789	792	800	797	790	792	800	803	801	798	790	785	786
21	787	786	785	787	790	788	783	786	794	802	803	799	790	786	788
22	786	787	787	788	785	773	773	774	784	798	798	793	785	785	787
23	785	787	786	776	767	765	768	772	781	792	794	788	783	783	784
24†	783	782	783	777	770	763	756	757	770	786	792	787	776	775	779
25	782	782	777	777	776	761	752	760	772	779	785	787	781	773	772
26	763	768	774	777	766	755	747	759	775	787	790	790	789	788	789
27	792	795	798	796	788	773	761	766	775	784	795	803	803	798	798
28	794	797	800	800	785	771	768	775	785	791	797	797	794	793	792
29	788	789	790	796	797	787	773	769	775	784	788	789	785	785	786
30†	789	790	791	797	794	780	764	774	778	782	787	790	789	791	793
31	795	796	799	802	801	797	789	787	794	802	806	810	812	811	810
Mean .	786	786	787	790	786	777	773	776	784	789	792	792	789	788	789
Mean† .	782	782	782	785	780	771	763	767	774	781	784	783	779	781	782

FEBRUARY.

1	798	797	798	801	802	792	784	788	793	788	782	780	783	788	790
2	778	777	777	776	765	761	765	758	762	771	775	773	773	772	770
3	755	755	755	759	752	752	749	756	766	773	767	758	753	755	757
4	756	757	759	755	751	751	760	775	792	801	802	805	806	806	808
5	807	808	811	815	820	817	813	816	827	830	828	824	820	819	820
6†	810	810	811	812	804	799	795	795	803	808	812	814	812	810	808
7	797	797	799	798	788	776	769	771	782	788	795	798	794	789	788
8	780	777	778	781	781	782	777	768	773	779	779	778	778	776	775
9	780	780	782	789	795	791	787	777	776	781	788	794	792	791	792
10†	797	797	796	801	803	803	797	791	789	791	792	797	797	796	795
11	797	798	799	805	805	799	793	793	795	799	799	801	799	797	796
12†	795	795	797	802	803	799	795	794	797	795	792	793	792	792	793
13	798	797	798	800	799	798	795	798	799	801	800	799	793	791	789
14	796	793	795	802	806	805	799	795	797	793	793	795	792	794	793
15	799	797	798	804	796	787	774	776	789	800	803	801	795	793	794
16	794	795	799	803	803	793	786	783	786	791	792	792	790	790	791
17	790	789	790	792	790	787	778	774	775	775	789	781	778	780	782
18	786	787	788	789	780	772	765	762	768	779	784	781	775	774	779
19	780	783	784	786	783	775	768	765	762	768	779	783	779	775	776
20†	783	785	788	793	799	799	795	792	796	804	809	815	812	808	809
21†	815	816	819	823	818	813	809	811	809	808	808	817	817	813	813
22	810	811	810	811	811	809	806	806	806	811	815	818	815	810	807
23	803	804	804	807	797	790	794	797	802	808	811	809	804	800	799
24	797	797	800	807	807	803	798	791	794	797	802	802	801	794	797
25	796	795	797	797	793	791	787	778	783	784	786	789	791	790	793
26	797	790	791	794	788	785	777	770	777	788	792	794	792	788	787
27	792	792	791	795	792	784	778	775	778	782	789	795	796	791	791
28	788	790	790	791	794	796	794	795	807	815	818	820	816	811	812
Mean .	792	792	793	796	794	790	785	784	789	793	795	797	794	793	793
Mean† .	802	802	804	809	807	804	799	797	799	802	803	807	806	804	803

† Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

JANUARY. 17000 γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
784	783	781	780	780	778	776	774	772	785	3 26	798	23 51	769	1
766	766	765	764	763	762	762	760	760	769	3 50	781	23 48	759	2
763	762	761	761	760	759	759	758	758	**760**	3 58	769	7 10	751	3†
785	784	786	787	787	787	788	788	790	778	23 57	791	1 40	759	4
817	816	815	815	814	813	812	811	810	**813**	11 13	819	0 00	800	5
811	809	809	808	807	806	804	804	803	812	3 01	**825**	23 10	803	6
797	796	796	795	794	793	791	790	790	798	3 48	809	23 50	789	7†
774	774	774	774	773	773	772	771	771	774	2 35	789	5 56	755	8†
772	773	773	772	773	773	771	771	773	768	3 06	782	5 55	**742**	9
783	784	783	783	784	784	785	785	784	778	10 14	790	4 57	759	10
796	796	797	798	798	798	799	797	798	792	18 39	800	5 55	766	11
807	806	805	805	807	806	805	806	806	801	15 27	808	6 44	782	12
805	804	803	805	805	805	805	805	806	799	10 38	813	5 57	762	13
802	800	800	799	798	797	796	795	795	800	9 02	812	5 42	783	14
786	785	785	785	785	783	784	783	781	782	3 01	802	5 38	745	15
777	777	775	777	776	775	775	774	775	779	8 47	791	23 26	770	16
781	780	780	779	778	777	776	775	774	778	3 00	787	5 22	769	17
787	785	785	784	784	782	784	784	785	781	10 35	789	0 58	769	18
791	791	792	791	790	788	789	789	789	791	7 59	799	5 12	784	19
787	789	789	788	787	786	786	787	786	791	9 04	804	12 46	783	20
788	789	788	786	786	785	784	784	785	789	9 14	805	6 14	781	21
786	785	787	787	776	786	785	785	785	786	9 26	802	5 21	770	22
783	783	783	783	783	783	782	782	783	781	9 26	796	4 52	763	23
779	780	781	781	781	781	781	780	781	777	10 14	793	6 02	755	24†
772	772	770	769	767	767	766	765	765	772	10 34	789	6 06	751	25
789	789	791	792	791	791	791	791	791	781	23 46	793	5 54	744	26
798	798	798	799	798	798	796	797	798	792	11 14	805	6 22	760	27
792	791	789	788	787	787	786	785	784	789	2 56	801	5 40	765	28
786	785	786	785	785	785	785	784	783	785	4 00	798	6 50	766	29
793	792	792	792	791	791	791	790	790	788	3 24	799	6 06	763	30†
809	809	808	807	807	805	804	802	800	813	11 46	813	6 26	785	31
789	788	788	788	787	787	786	785	785	786					Mean.
782	782	782	782	781	781	781	780	780	779					Mean.†

FEBRUARY.

790	790	789	789	788	788	787	785	783	789	3 50	805	23 45	778	1
770	768	768	768	766	764	763	761	761	768	0 00	780	7 22	753	2
758	757	757	757	758	756	754	754	753	**757**	8 59	775	5 54	**746**	3
809	810	812	813	813	813	813	814	809	792	21 54	815	4 16	749	4
820	819	819	820	820	821	819	818	817	**819**	8 32	**832**	0 00	807	5
808	808	809	809	808	808	807	805	805	807	10 41	815	6 38	793	6†
788	787	787	787	787	787	786	785	784	787	2 04	799	6 14	766	7
775	775	777	777	778	779	780	781	781	778	4 58	783	7 14	767	8
792	793	793	793	793	793	793	793	793	789	3 56	797	7 58	775	9
795	794	793	793	794	793	792	792	792	795	4 01	804	7 05	788	10†
796	795	795	795	794	792	791	791	791	797	3 28	807	23 41	790	11
793	793	792	792	792	791	791	791	790	794	3 58	804	22 59	789	12†
789	790	790	788	787	786	780	789	787	793	8 39	803	21 26	767	13
792	794	794	795	795	795	794	794	793	796	3 58	809	9 10	789	14
794	791	790	791	793	791	789	790	791	793	3 25	806	5 52	772	15
790	789	790	789	789	789	788	787	787	791	3 42	806	6 52	780	16
782	783	783	785	785	785	785	784	784	783	3 02	794	6 45	772	17
779	779	779	780	781	780	780	779	779	778	2 24	790	6 26	759	18
778	778	778	779	779	780	780	780	**781**	778	3 06	787	7 48	761	19
811	812	814	816	817	816	816	816	816	806	19 45	818	0 00	783	20†
813	813	814	815	815	815	814	813	813	814	2 54	825	9 42	805	21†
806	805	805	807	807	806	805	804	804	808	9 54	818	22 02	803	22
799	798	799	800	801	801	799	800	800	801	10 25	813	5 12	789	23
800	803	803	807	805	804	804	806	805	801	19 30	810	7 03	787	24
793	794	794	795	793	796	792	794	797	791	23 41	800	6 54	776	25
789	790	788	789	789	790	791	791	793	788	0 18	801	6 51	766	26
790	791	791	791	791	789	789	789	789	789	11 43	798	6 28	773	27
812	813	813	813	813	812	813	813	813	807	11 06	821	0 02	787	28
793	793	793	794	794	794	793	793	793	793					Mean.
803	803	804	804	804	803	803	802	801	803					Mean †

*The daily mean values of vertical force derived from 24 hourly values, have been corrected for progressive change by $\frac{1}{24}$th of the difference between the values of the initial and terminal hours.

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

MARCH. 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	812	814	816	815	812	805	804	804	810	821	827	824	821	819	818
2	808	810	810	810	795	790	794	793	800	804	805	804	801	799	801
3	797	799	800	795	781	779	783	784	793	798	799	800	797	791	789
4	792	794	797	793	786	776	775	769	773	781	783	784	784	786	788
5	796	800	804	805	793	783	782	790	798	804	806	807	803	801	801
6†	809	813	816	813	804	798	800	802	807	819	825	825	820	816	814
7	818	820	822	817	805	791	785	791	798	803	805	812	814	811	809
8	813	815	819	822	819	809	803	804	806	811	816	815	813	815	814
9	812	815	818	822	813	796	786	782	794	807	811	811	810	808	805
10	812	812	815	816	809	797	790	787	793	802	806	807	807	804	801
11†	805	805	807	806	804	795	787	782	788	796	797	797	799	800	798
12	803	806	813	813	806	792	781	781	794	805	806	803	804	805	805
13	799	801	810	807	797	790	778	774	780	789	792	790	791	792	794
14	796	796	800	795	783	773	765	764	774	791	794	789	786	791	795
15	795	797	800	799	795	791	779	779	793	808	814	811	807	808	813
16	816	818	822	822	812	807	790	791	803	816	821	822	819	817	816
17	816	819	826	**828**	819	794	772	767	778	793	801	809	812	814	815
18†	817	820	825	825	813	801	785	778	787	805	811	810	812	817	819
19†	818	819	822	817	806	797	789	781	783	801	817	821	816	810	810
20	811	815	822	825	817	801	784	783	788	799	804	803	800	798	800
21	800	799	803	809	804	799	784	778	781	794	805	805	800	793	795
22	797	800	805	802	793	783	769	759	771	783	793	792	788	790	792
23	798	798	802	804	798	796	789	782	789	802	806	805	805	803	801
24	809	811	815	813	803	795	791	792	796	805	806	803	803	805	804
25	806	808	813	808	796	785	773	769	775	791	802	802	799	797	797
26	807	809	811	810	804	799	788	781	785	793	800	800	797	796	798
27	802	803	801	796	789	780	768	767	773	782	792	794	796	793	792
28	793	795	795	791	777	767	761	765	774	783	789	783	778	779	783
29	785	786	787	784	781	775	763	755	763	777	783	779	775	776	778
30†	780	781	784	782	775	765	752	752	757	769	779	776	771	769	769
31	769	771	772	764	751	750	**750**	762	778	799	813	814	813	812	814
Mean .	803	805	**808**	807	798	789	781	**779**	787	798	804	803	801	801	801
Mean† .	805	807	**810**	808	800	791	782	**778**	784	798	806	806	803	802	802

APRIL

1	814	817	819	815	805	798	784	779	789	805	814	812	808	806	807
2	810	811	813	814	812	806	795	784	787	796	810	812	813	811	808
3	807	810	815	815	811	796	779	781	793	809	815	813	811	810	808
4	811	815	816	809	801	793	778	771	777	791	807	811	810	809	810
5	809	812	819	816	810	793	782	779	792	805	814	817	817	813	810
6†	808	810	818	817	808	798	793	792	801	807	814	814	808	802	800
7	797	799	803	796	786	778	774	774	778	789	797	795	794	788	785
8	783	784	792	792	784	773	756	751	765	784	799	803	801	798	797
9	807	811	816	812	801	793	783	781	789	797	805	806	806	805	802
10	812	815	819	819	817	803	793	791	796	802	813	821	821	817	814
11	821	825	826	821	812	800	787	790	802	818	825	828	827	823	823
12†	822	827	828	822	804	788	776	776	789	811	821	823	817	811	810
13†	811	814	817	810	794	786	783	784	792	804	808	808	803	802	800
14†	801	806	806	800	788	764	753	757	763	775	785	791	792	794	789
15	789	795	801	800	781	757	741	737	747	765	776	779	775	777	776
16	782	788	792	788	777	763	751	754	768	778	786	796	798	796	795
17	804	809	818	817	800	788	778	777	782	792	804	805	804	801	799
18	807	810	813	806	801	791	783	787	796	798	798	802	803	803	802
19	807	811	10	799	791	784	782	785	794	799	803	806	807	804	801
20	802	808	810	806	789	779	775	780	788	797	807	811	806	805	803
21	801	804	809	804	795	787	783	779	790	795	795	793	793	792	788
22	782	787	793	785	770	754	751	764	764	769	772	776	778	775	770
23	771	775	776	773	768	753	745	748	757	764	766	766	767	767	763
24	764	769	770	763	761	762	768	780	793	801	807	812	811	808	810
25	819	824	824	813	798	788	797	790	796	803	808	814	819	819	817
26	824	829	**831**	830	826	818	813	809	813	816	822	829	830	827	824
27	824	830	828	820	806	794	793	796	805	813	818	824	826	826	825
28	819	824	825	820	808	797	789	788	797	808	817	823	823	818	817
29†	821	826	820	807	794	788	785	789	792	802	812	817	813	807	807
30	810	815	811	803	789	784	778	780	787	798	807	809	805	798	796
Mean .	805	809	**811**	806	796	785	777	777	786	796	804	807	806	804	802
Mean† .	807	811	**813**	807	794	781	775	777	785	798	807	810	807	804	802

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

MARCH. 17000 γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
816	816	816	814	814	814	813	812	812	814	10 05	827	6 44	802	1
801	799	800	800	799	800	799	798	797	801	2 50	812	5 01	789	2
789	790	790	789	788	788	789	790	791	791	2 04	801	4 40	775	3
789	790	792	794	794	794	795	794	795	788	2 18	797	7 30	768	4
802	805	806	805	805	805	804	804	804	801	10 43	808	5 36	780	5†
814	814	815	815	814	813	812	811	811	813	10 06	827	5 30	797	6†
809	811	812	811	812	812	812	811	810	808	1 56	823	5 51	783	7
813	813	814	815	814	813	811	810	810	813	2 58	823	6 22	800	8
804	805	806	806	805	805	804	805	803	806	3 05	824	6 38	778	9
801	801	801	800	801	800	799	797	796	802	3 00	817	6 50	785	10
798	798	798	798	799	799	799	799	799	798	2 30	808	7 17	781	11†
803	804	803	804	803	802	795	795	798	801	2 18	815	6 40	779	12
794	796	795	792	791	794	793	791	792	793	2 26	812	6 53	773	13
793	794	796	796	795	796	796	796	796	789	2 30	802	6 05	760	14
815	816	817	818	818	818	818	817	817	806	17 54	819	6 30	775	15
817	818	818	818	818	817	816	816	815	814	2 34	825	6 41	787	16
815	816	816	817	817	817	817	817	816	809	2 51	829	6 42	762	17
820	821	821	821	821	821	821	819	819	813	2 56	826	6 49	776	18†
810	811	811	811	811	810	810	808	808	808	11 02	822	7 41	778	19†
800	799	801	801	802	801	800	800	799	802	2 54	826	6 21	782	20
798	798	800	801	800	799	797	797	796	797	2 54	810	7 46	775	21
794	796	796	797	797	797	798	797	797	791	2 20	807	6 03	763	22
802	803	805	805	806	806	805	805	804	801	9 50	807	7 16	781	23
805	805	807	807	807	805	804	804	803	804	2 10	817	6 10	790	24
801	802	802	803	802	803	803	800	800	797	2 18	813	6 42	767	25
798	799	800	801	801	800	800	800	800	799	2 30	813	7 12	778	26
793	794	793	795	794	793	793	793	792	790	1 12	805	6 29	765	27
785	786	787	787	787	787	787	786	786	783	1 51	798	6 14	759	28
779	781	781	781	781	782	781	780	781	778	1 58	789	7 08	753	29
770	771	771	771	771	771	771	770	770	771	2 06	784	6 15	749	30†
815	819	820	820	821	821	822	820	820	797	19 20	822	5 25	747	31
801	802	803	803	803	803	802	801	801	799					Mean.
803	803	804	804	804	803	803	802	802	800					Mean.†

APRIL.

809	810	811	812	813	809	810	810	811	807	2 14	820	6 56	777	1
807	808	809	810	809	810	808	807	807	806	2 35	815	7 26	783	2
813	816	815	815	816	816	814	815	815	809	20 04	818	6 18	776	3
811	813	816	817	817	815	815	815	814	806	18 51	818	6 36	769	4
811	813	814	814	814	813	813	812	811	808	2 09	820	6 57	777	5
801	802	802	803	803	802	801	800	799	804	2 34	820	6 43	790	6†
786	787	788	789	789	789	788	786	785	788	1 59	804	6 20	773	7
800	803	805	806	807	808	809	809	809	793	21 21	810	6 32	748	8
805	806	808	809	811	811	810	810	808	804	1 49	817	6 54	778	9
815	817	819	821	820	819	819	817	818	813	11 06	823	7 03	787	10
821	822	823	824	824	824	823	823	823	818	11 01	829	6 16	785	11
811	812	812	812	812	812	812	811	811	809	1 42	829	6 14	774	12†
801	802	802	802	802	802	801	801	801	801	1 50	819	6 34	781	13†
789	791	792	792	793	793	792	791	791	787	1 37	808	5 57	752	14†
778	780	781	782	783	782	782	782	782	776	2 13	803	6 37	736	15
798	800	803	805	807	806	806	806	806	790	23 23	808	6 23	749	16
801	803	805	805	806	807	806	806	806	801	2 58	820	6 38	776	17
802	803	805	805	806	806	806	806	805	802	2 04	814	6 00	781	18
803	808	808	809	806	807	808	805	803	801	1 41	813	5 47	780	19
804	806	807	808	808	807	807	805	805	801	10 53	813	5 56	775	20
788	790	790	791	791	790	789	787	786	792	1 55	810	7 06	777	21
770	772	774	775	774	773	772	771	771	772	1 41	794	5 41	749	22
762	764	766	766	766	766	766	766	767	764	1 26	779	6 36	744	23
811	812	815	816	817	817	818	818	818	798	0 00	819	4 40	759	24
817	820	824	825	826	826	825	826	824	814	20 27	827	5 25	786	25
825	826	827	827	828	827	828	828	828	824	1 43	833	6 53	807	26
825	826	827	829	829	829	829	828	828	820	1 23	832	5 23	791	27
818	819	820	821	820	820	820	820	820	815	1 41	827	6 34	785	28
807	808	810	810	810	810	810	809	809	807	1 10	828	5 50	784	29†
797	800	802	802	801	801	801	801	803	799	1 06	817	6 06	777	30
803	805	806	807	807	807	806	806	805	801					Mean.
803	805	806	807	807	807	807	807	807	802					Mean.†

*See footnote on page 113.
†Five international quiet days.

LIBRARY

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

MAY. 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	804	810	807	796	777	769	773	779	785	793	798	801	799	794	793
2	801	809	808	798	779	768	766	774	786	798	805	816	816	809	808
3	819	828	832	823	805	791	785	792	807	818	823	826	819	808	810
4	820	825	823	811	794	787	788	797	807	817	824	825	818	812	813
5	818	823	820	810	795	786	783	789	800	809	813	815	815	811	809
6	814	817	810	800	785	782	784	793	804	814	818	814	807	801	802
7	804	806	804	798	788	779	783	792	795	793	793	796	794	789	792
8	792	795	791	786	779	767	766	772	778	787	796	798	795	787	787
9†	785	788	789	781	768	758	756	765	774	783	786	786	783	780	779
10†	785	789	795	789	776	762	755	758	766	776	782	782	777	778	778
11	778	782	783	776	758	749	759	772	788	806	818	821	819	819	823
12	833	843	844	831	819	814	819	823	828	838	844	842	839	835	834
13	832	835	830	824	818	807	805	809	812	817	821	824	825	824	824
14	825	831	822	810	795	783	783	789	800	811	813	815	817	816	816
15	823	831	824	808	786	781	783	791	800	809	813	816	815	813	814
16	826	832	826	816	805	797	796	800	809	817	824	827	821	817	816
17	820	823	816	806	791	783	788	792	798	811	821	827	823	813	809
18	812	818	815	805	791	786	792	801	813	823	825	825	817	807	803
19	803	805	799	792	783	776	776	781	785	792	798	803	800	795	794
20	799	805	802	791	773	763	770	787	801	811	819	827	835	834	831
21	843	849	847	842	833	823	821	821	825	831	835	837	841	835	836
22†	842	847	849	846	827	807	806	815	829	837	841	840	838	835	832
23†	837	843	841	843	819	807	802	809	819	828	832	831	829	825	819
24	813	817	818	813	793	781	778	779	782	786	798	803	802	796	792
25	794	801	803	790	771	759	759	767	776	785	789	787	784	782	782
26	793	797	789	790	747	729	738	751	768	783	791	791	783	776	776
27	788	793	792	780	761	744	740	744	758	767	773	779	781	777	775
28†	776	780	777	771	761	762	777	789	800	819	833	845	849	845	842
29	841	848	846	842	828	812	807	805	810	824	828	831	835	837	838
30	837	844	843	833	822	814	811	808	814	823	829	833	832	828	828
31	827	835	836	830	813	798	792	787	795	808	811	819	825	823	818
Mean .	813	818	815	807	792	781	782	788	797	807	813	816	814	810	809
Mean† .	808	812	813	807	792	781	781	788	799	810	815	817	815	812	809

JUNE.

1	817	825	827	820	799	781	774	778	787	802	812	818	820	812	806
2	819	830	831	818	789	764	757	765	778	791	798	807	816	817	812
3	817	821	823	817	803	791	775	776	782	791	799	803	802	799	799
4	798	803	805	800	793	791	790	783	780	783	787	791	792	791	788
5†	784	783	779	772	763	759	758	767	782	796	807	814	816	811	806
6	813	822	824	817	813	801	786	775	781	790	799	812	817	822	816
7	823	827	824	819	811	800	793	795	801	812	824	833	837	824	829
8	830	837	835	822	801	787	787	785	785	797	812	825	828	829	828
9	829	836	843	840	824	817	813	817	822	823	824	822	826	829	826
10	823	828	825	820	817	813	811	806	805	808	817	821	817	816	814
11	821	826	824	818	810	801	799	798	799	803	808	812	815	815	814
12	826	828	828	824	816	811	802	801	807	813	819	824	822	817	815
13	827	831	821	801	775	763	769	779	789	802	811	813	810	809	807
14	811	814	810	803	791	783	780	782	788	798	808	815	816	810	801
15†	813	816	816	811	800	788	781	781	791	805	808	810	807	802	800
16†	798	803	800	793	783	771	758	755	757	767	770	774	780	783	783
17†	782	785	787	787	787	787	792	789	793	800	804	815	823	822	816
18	825	832	832	831	822	812	809	806	808	817	822	825	828	829	828
19	830	834	831	820	809	806	814	814	816	816	817	821	830	831	829
20	833	840	841	831	820	811	812	818	822	828	827	829	833	834	832
21	833	839	840	835	820	807	798	787	790	799	804	806	808	809	809
22	819	824	828	826	815	794	791	805	813	823	828	834	830	824	819
23	829	833	832	825	812	802	798	804	807	809	810	818	822	822	821
24	832	835	836	829	817	806	801	801	807	819	822	822	822	821	821
25†	827	829	828	823	816	805	792	788	795	803	809	818	820	819	816
26	816	821	822	817	801	786	779	781	782	784	785	791	801	805	800
27	798	806	809	795	779	765	760	762	769	778	782	786	786	784	783
28	788	795	793	783	762	751	747	753	757	768	774	776	778	776	775
29	777	780	775	770	775	783	790	794	805	816	821	830	830	826	824
30	837	842	830	817	820	820	813	813	833	839	840	843	841	837	833
Mean .	816	821	820	813	801	792	788	789	794	803	808	813	816	815	812
Mean† .	803	806	805	800	792	783	778	777	785	795	800	806	809	807	803

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

MAY. 17000 γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
795	797	797	797	796	796	796	795	795	793	1 0	811	5 0	767	1
811	813	815	816	816	816	815	815	815	803	11 30	819	5 54	764	2
814	817	819	820	819	818	818	817	817	815	2 6	833	6 0	784	3
816	817	818	818	818	818	817	816	816	813	1 28	827	5 24	785	4
810	812	814	815	816	815	815	813	812	809	1 30	824	6 10	783	5
804	806	807	807	807	806	806	805	804	804	9 30	823	5 0	781	6
792	793	794	795	795	794	794	794	793	794	1 0	808	4 52	774	7
787	788	787	788	787	787	787	787	787	786	11 24	799	5 30	763	8
781	781	782	783	783	782	782	782	782	779	1 50	789	5 40	753	9†
777	779	780	779	780	780	780	779	779	777	2 14	796	6 0	755	10†
824	827	831	831	831	832	832	833	832	806	22 2	834	4 50	747	11
834	835	836	836	835	835	835	835	835	833	1 38	847	5 0	811	12
825	826	827	828	827	828	825	824	825	822	1 0	836	5 18	803	13
816	819	821	822	821	821	821	820	823	813	1 6	833	5 22	780	14
813	816	819	820	819	820	820	820	821	811	1 10	834	5 30	779	15
818	818	819	819	819	817	819	819	819	816	1 0	833	5 30	794	16
811	813	814	813	813	811	811	809	810	809	11 18	828	4 44	781	17
804	803	805	807	805	803	802	801	804	806	9 28	826	4 50	783	18
795	796	798	797	795	794	794	794	794	793	0 48	807	5 26	775	19
831	832	834	835	834	835	835	835	834	816	11 54	837	5 16	762	20
838	838	839	840	839	838	837	836	835	836	1 6	850	6 50	819	21
832	832	832	832	831	830	829	827	827	832	1 48	850	5 24	803	22†
821	820	820	820	819	818	818	817	816	822	0 50	843	5 56	801	23†
795	796	796	796	796	795	795	794	794	796	0 58	818	5 50	777	24
785	786	788	787	787	789	790	790	792	784	1 38	804	5 20	756	25
781	783	782	783	783	784	784	783	784	777	0 40	799	5 2	726	26
779	780	781	782	780	780	780	779	779	774	1 8	794	5 56	738	27
844	844	845	846	846	846	846	847	847	820	11 56	850	4 34	758	28†
839	840	841	842	843	843	843	842	843	834	0 58	849	7 26	803	29
830	831	832	831	830	829	830	830	830	828	1 10	845	6 58	807	30
819	820	821	821	821	821	820	820	820	817	1 30	836	6 56	786	31
810	812	813	813	813	812	812	811	812	807					Mean.
810	810	811	811	810	809	809	808	808	806					Mean.†

JUNE.

808	809	813	816	815	815	815	816	819	809	1 56	828	6 20	774	1
814	815	819	818	814	812	813	812	811	805	1 18	833	5 50	755	2
799	801	802	801	800	801	799	799	798	797	2 00	824	6 24	772	3
786	787	789	788	787	787	785	785	785	789	1 46	805	8 00	779	4
809	810	812	813	813	813	814	814	813	797	11 50	817	6 04	757	5†
816	819	821	822	822	823	823	822	822	812	1 16	825	6 50	773	6
830	830	831	831	832	831	831	830	830	823	12 30	838	6 12	791	7
828	829	832	834	835	835	831	830	829	820	1 22	840	7 18	783	8
827	828	830	830	829	828	828	827	827	827	2 16	845	5 40	811	9
813	814	817	820	819	818	817	815	815	816	0 56	828	8 10	804	10
815	814	815	817	817	817	817	817	818	813	1 05	828	6 42*	797	11
815	819	817	819	820	817	818	818	817	817	1 56	831	6 40	799	12
809	808	809	810	810	809	809	809	808	803	1 08	832	4 50	763	13
804	807	808	808	807	807	807	807	809	803	11 40	817	6 24	778	14
799	800	801	801	799	797	796	796	795	800	1 16	817	6 40	779	15†
782	783	783	784	785	785	784	784	783	780	1 12	803	7 30	754	16†
818	820	821	821	821	821	822	821	821	807	12 16	825	0 00	781	17†
827	828	830	832	832	832	831	830	831	825	1 00	836	7 30	805	18
829	830	831	833	833	833	833	831	831	825	1 16	835	4 34	802	19
833	833	832	833	834	833	832	831	831	829	1 34	843	5 20	808	20
810	811	815	817	819	820	818	817	816	813	1 30	841	7 10	785	21
822	824	825	825	825	825	824	823	821	820	11 00	836	5 36	786	22
821	822	825	824	824	823	823	823	823	819	1 20	834	5 50	795	23
820	821	821	821	821	821	821	819	819	820	1 30	836	6 38	799	24
815	815	816	817	817	817	816	815	815	813	0 48	830	3 44	787	25†
795	799	803	803	805	805	801	802	802	799	2 06	822	5 56	777	26
786	786	788	787	787	786	787	786	787	784	1 40	813	6 00	759	27
775	775	776	778	778	777	777	776	778	773	0 52	798	5 30	745	28
824	827	829	829	830	830	831	831	832	812	11 06	833	2 38	768	29
835	837	837	837	839	839	839	839	840	834	0 58	844	6 30	808	30
812	813	815	816	816	815	815	814	814	810					Mean.
804	805	806	806	805	805	804	803	803	800					Mean.†

*See footnote on page 113.

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

JULY. 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	847	854	851	840	830	822	822	821	822	827	838	845	845	842	838
2	849	**854**	853	843	830	823	810	814	821	827	838	844	840	836	835
3	834	838	833	818	831	794	799	809	813	820	826	829	827	825	817
4	821	827	828	819	798	784	779	779	789	800	807	811	813	808	805
5	807	812	809	801	793	788	771	771	782	791	799	803	806	804	799
6	801	807	812	809	797	777	761	755	763	778	783	789	797	795	792
7	800	807	809	796	768	762	773	785	799	804	810	820	829	833	831
8	841	844	840	819	805	811	813	820	832	840	845	844	842	839	836
9†	843	845	838	832	834	834	830	828	826	83)	836	839	844	845	838
10†	842	846	848	846	844	838	833	838	849	849	848	846	843	838	835
11	842	843	837	828	819	814	807	807	810	823	834	836	832	829	824
12	825	831	829	817	801	793	800	800	801	809	804	815	817	816	812
13	812	815	812	808	804	802	798	795	796	799	801	804	805	803	798
14	804	807	803	795	784	777	781	788	798	807	807	808	805	806	810
15	828	833	830	825	820	816	812	812	810	811	821	832	833	829	820
16	831	837	836	832	825	818	815	817	820	827	831	835	832	825	823
17	822	827	824	824	820	816	812	816	816	812	808	816	818	814	808
18	802	806	800	792	778	775	781	778	785	794	801	805	801	799	796
19†	793	797	801	798	774	768	767	765	772	775	781	786	789	786	780
20†	780	785	784	777	762	754	746	750	755	763	772	776	777	774	769
21†	772	776	778	777	757	765	778	791	793	805	823	827	824	819	816
22	829	833	833	827	810	808	811	820	817	819	824	831	832	829	826
23	832	839	840	837	824	799	798	803	810	815	821	826	822	821	821
24	832	836	835	832	826	818	814	807	806	811	819	828	828	828	824
25	826	829	823	816	808	795	787	788	800	810	811	813	813	818	815
26	821	825	825	819	810	802	805	803	798	801	803	809	807	815	813
27	819	823	823	825	821	809	805	804	805	802	795	792	802	809	819
28	809	813	809	797	780	757	**748**	763	774	783	792	798	796	794	795
29	801	806	803	793	782	772	768	765	770	777	784	793	795	794	793
30	799	800	799	800	790	790	788	790	797	805	806	805	806	807	807
31	819	825	824	816	798	780	783	794	798	810	823	831	829	826	822
Mean . .	819	**823**	821	815	804	795	**798**	796	801	807	813	817	818	816	813
Mean† . .	809	813	813	811	796	794	**793**	796	800	805	813	815	**816**	812	807

AUGUST.

1	828	832	829	825	818	813	817	817	814	816	821	828	829	825	823
2†	826	831	827	815	796	781	784	794	804	815	818	818	819	818	816
3	820	826	825	820	814	812	812	802	796	802	807	809	810	811	810
4	817	820	820	811	794	783	784	785	791	801	801	802	801	803	806
5	813	817	817	809	803	807	810	815	808	804	804	807	809	808	809
6	810	812	814	812	798	784	778	774	778	785	801	806	797	793	795
7	803	805	804	795	782	776	781	782	792	801	809	811	813	815	819
8	829	829	825	825	815	806	798	791	790	792	804	816	816	814	811
9	823	827	826	816	812	812	819	826	824	824	821	823	829	823	825
10	827	829	828	826	821	817	809	809	819	830	831	825	823	821	816
11	822	824	822	815	807	800	799	801	804	807	806	803	804	807	808
12†	811	815	815	809	800	792	800	809	810	810	806	805	801	797	798
13	802	809	807	788	775	765	767	772	775	786	794	795	793	790	791
14	798	805	805	797	785	773	765	763	772	788	793	798	798	789	787
15	793	799	799	789	760	749	755	771	783	800	813	819	818	811	811
16	821	827	829	822	802	801	800	806	817	821	826	830	832	823	816
17†	828	**836**	829	807	782	779	786	789	793	802	812	819	823	819	814
18†	800	826	828	820	801	783	775	774	784	798	807	815	818	816	813
19	814	818	820	812	802	796	790	791	802	804	801	804	803	804	805
20	806	810	815	816	806	799	796	789	792	802	806	811	807	801	801
21	796	799	797	791	781	772	774	774	774	773	779	786	788	792	790
22	790	793	790	780	773	773	771	771	779	782	785	788	781	779	781
23	785	790	793	780	755	747	752	764	777	786	790	791	789	782	781
24	784	789	793	787	768	762	759	772	787	798	811	811	806	803	807
25	813	816	816	797	769	767	782	800	809	816	821	823	820	812	812
26	818	822	811	791	772	760	770	785	801	812	822	825	821	809	804
27	805	811	809	790	764	753	757	762	774	792	805	811	808	812	817
28	828	833	834	820	801	788	783	788	799	812	823	829	829	821	818
29	818	826	826	816	796	778	770	767	779	801	813	818	815	807	806
30†	790	794	791	771	745	**733**	742	745	750	765	777	785	786	781	777
31	779	787	785	770	753	744	737	734	743	752	760	770	774	772	770
Mean . .	810	**815**	814	804	789	**781**	781	785	791	799	805	809	808	805	804
Mean† . .	806	**817**	815	802	782	**771**	776	780	787	797	804	808	809	806	804

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

JULY. 17000 γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.)									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
839	839	841	843	843	843	842	841	841	838	1 10	856	7 20	819	
835	838	839	838	838	836	834	831	830	835	1 12	**857**	6 05	806	1
816	816	819	818	817	816	814	813	812	819	1 00	840	4 59	793	3
805	805	807	808	808	806	806	806	803	805	1 44	828	6 40	778	4
797	798	798	798	798	799	798	797	797	797	1 04	814	6 28	765	5
791	793	795	796	796	796	795	793	792	790	1 54	814	6 36	753	6
831	832	835	837	837	838	837	837	836	815	19 54	838	4 12	760	7
837	838	839	839	839	841	840	840	840	834	10 41	846	4 02	799	8
838	839	840	841	842	842	842	842	841	838	12 38	847	8 24	824	9†
835	836	838	838	839	839	840	839	839	**841**	8 24	851	6 06	832	10†
824	826	827	829	831	830	828	825	824	826	1 03	844	6 24	805	11
809	809	811	812	811	811	812	811	811	810	1 26	833	5 02	790	12
798	799	800	800	800	802	801	800	799	802	1 12	816	7 22	794	13
810	815	819	818	818	820	821	821	822	806	23 59	825	5 10	776	14
820	822	823	824	824	825	825	823	824	823	1 02	835	8 40	807	15
825	826	826	826	826	825	823	822	821	826	1 10	839	6 16	814	16
809	811	811	810	809	809	809	808	808	814	1 10	828	9 46	806	17
794	795	794	796	796	795	794	793	792	793	0 50	808	4 06	773	18
781	781	781	781	781	780	780	779	779	781	1 50	802	4 09	763	19†
770	772	773	774	775	773	773	773	773	**770**	1 06	786	6 10	745	20†
818	821	823	827	829	829	829	829	829	807	12 34	830	6 12	754	21†
827	828	829	831	832	833	832	833	833	826	2 04	835	6 30	805	22
827	831	831	831	836	837	835	836	835	825	1 34	841	5 08	792	23
821	821	823	824	824	824	825	826	826	823	1 24	838	7 30	804	24
815	815	817	817	819	822	821	822	821	813	0 48	831	6 32	783	25
811	814	815	816	816	815	815	816	815	812	2 18	827	7 44	796	26
807	807	808	809	809	809	809	809	809	809	3 06	827	11 04	790	27
797	797	798	799	800	801	802	798	799	791	1 22	814	5 06	**743**	28
793	793	795	795	796	795	795	794	795	789	1 20	808	7 10	763	29
809	811	814	816	817	815	814	815	814	805	19 16	817	6 06	785	30
822	823	824	826	827	828	827	827	827	817	11 02	832	5 28	775	31
813	815	816	817	817	817	817	816	816	812					Mean.
807	809	810	811	811	811	810	810	809	807					Mean.†

AUGUST.

823	825	826	827	827	827	826	825	824	**824**	1 08	834	5 00	813	1
816	818	819	819	820	820	820	819	819	814	1 06	833	5 06	780	2†
811	813	815	816	816	816	815	815	814	813	1 00	829	7 43	794	3
807	808	811	813	815	814	813	813	812	805	1 44	822	5 06	781	4
808	809	811	812	811	810	811	810	809	810	1 37	820	9 30	802	5
798	799	800	802	804	803	803	802	802	798	2 12	815	6 50	773	6
820	821	825	827	828	829	829	829	828	810	19 48	830	4 36	773	7
810	813	815	818	820	821	820	819	819	813	1 12	831	8 05	787	8
824	821	823	824	825	825	826	825	823	823	12 00	831	4 50	808	9
817	818	820	820	820	820	820	819	820	821	9 40	833	7 11	807	10
808	809	811	812	813	813	813	813	812	809	0 42	825	6 09	798	11
799	801	801	802	802	801	801	801	801	803	1 54	816	5 00	791	12†
791	791	793	794	796	796	795	795	794	790	1 28	812	5 10	763	13
788	791	792	792	791	790	790	790	790	789	1 24	807	7 00	762	14
814	813	815	817	817	818	820	820	819	801	11 34	820	5 12	749	15
822	824	826	827	827	826	825	824	824	821	11 46	835	4 16	798	16
815	818	820	822	822	821	821	820	821	812	1 06	**838**	4 40	775	17†
811	812	814	815	815	815	814	815	815	808	1 34	830	7 10	772	18†
803	803	805	807	807	807	807	803	805	805	1 58	822	6 42	787	19
797	798	800	801	800	802	801	800	799	802	2 50	818	7 18	787	20
786	788	788	790	791	791	790	790	791	786	1 00	801	5 04	770	21
782	784	783	784	783	783	783	783	784	782	1 30	794	6 42	769	22
780	781	782	783	784	784	784	784	784	779	1 34	794	5 02	746	23
806	809	810	811	810	812	812	813	813	798	23 14	819	5 46	756	24
815	817	817	816	817	817	816	815	817	809	11 38	823	4 14	761	25
805	805	807	806	805	805	806	805	805	803	11 08	826	5 02	759	26
820	822	825	826	827	828	829	829	828	805	21 46	831	8 08	767	27
820	819	820	819	819	817	818	818	817	815	1 44	838	5 42	782	28
807	808	809	809	809	808	808	807	807	804	1 06	828	7 10	765	29
778	780	782	783	783	784	784	783	784	774	1 20	795	5 01	**731**	30†
772	774	776	778	777	777	777	777	775	**767**	1 08	788	7 00	733	31
805	806	808	809	809	809	809	808	808	803					Mean.
805	807	809	810	811	811	811	811	811	802					Mean.†

*See footnote on page 113.

†Five international quiet days.

SEPTEMBER. (Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)
17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.)														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	762	769	770	763	748	744	756	770	785	805	818	827	829	826	824
2†	830	837	839	829	818	805	795	799	806	819	831	**839**	837	833	830
3	822	828	819	817	793	785	791	796	806	819	821	815	811	813	817
4	805	810	814	810	795	781	775	768	771	787	797	799	801	798	796
5	794	797	800	794	786	772	768	775	785	789	795	795	791	785	785
6	780	783	785	778	766	759	748	746	751	755	759	761	767	770	767
7	758	761	766	758	**744**	746	752	759	775	785	795	803	807	807	805
8	801	806	808	795	781	769	767	782	791	797	805	812	813	807	805
9	806	814	813	809	806	802	802	802	804	802	806	811	812	810	809
10	810	820	820	807	794	790	784	777	780	795	809	814	814	809	808
11	815	821	818	805	790	780	773	779	788	800	808	811	810	808	807
12	811	816	816	804	791	778	772	781	788	801	807	812	812	810	810
13	810	816	816	805	793	784	784	787	795	805	812	813	812	809	806
14	817	822	823	811	792	787	781	788	801	813	820	822	820	818	815
15	822	830	831	810	792	780	773	775	787	801	808	802	798	799	798
16	808	812	807	791	775	769	767	769	775	790	794	798	799	799	793
17	805	807	810	798	788	783	780	781	788	799	808	813	808	801	799
18†	813	815	815	807	793	783	778	785	793	799	804	807	805	802	802
19†	805	807	809	802	790	779	777	783	792	799	799	796	793	795	795
20	790	791	795	789	772	768	768	775	785	791	794	788	779	777	780
21	778	781	784	774	761	755	751	755	763	772	775	776	772	769	770
22	772	776	778	765	751	749	755	767	779	789	796	796	795	801	803
23	808	810	814	803	789	785	783	785	797	807	811	812	809	807	808
24	811	815	818	807	792	783	783	785	789	796	804	809	809	805	805
25	807	809	813	806	795	790	787	787	794	803	810	811	808	803	804
26	808	809	813	804	791	787	787	794	796	800	802	803	801	800	799
27	803	805	807	806	801	799	794	791	795	801	802	798	794	791	793
28†	796	797	799	797	792	797	798	794	799	805	805	799	793	789	790
29†	794	797	799	791	775	763	761	762	781	798	807	808	801	803	806
30	811	815	822	813	794	775	753	761	781	798	807	808	803	802	806
Mean . .	802	806	**807**	798	785	778	**775**	779	787	797	804	805	803	801	801
Mean† . .	806	809	**811**	804	792	784	**781**	784	794	804	809	810	806	804	805

OCTOBER.

1	820	819	827	821	803	780	**764**	774	790	806	823	826	816	811	813
2	820	824	825	823	812	802	795	796	802	809	821	825	821	821	821
3	821	824	822	812	799	792	788	786	796	806	814	818	814	809	810
4	808	809	814	809	798	793	788	789	796	808	810	809	805	803	799
5	795	803	806	798	793	790	788	787	794	795	794	796	798	791	791
6	789	793	796	793	786	775	771	771	777	788	792	787	780	776	778
7	783	789	796	792	783	780	779	781	793	804	810	811	811	811	814
8	821	822	826	821	818	809	805	809	815	821	823	821	817	816	817
9†	815	817	818	809	793	784	788	797	808	809	803	806	803	805	807
10†	811	813	811	804	794	788	788	791	800	809	814	813	806	802	804
11†	811	815	813	794	776	778	789	794	807	817	822	820	815	813	813
12	817	822	825	819	807	794	795	807	823	831	833	826	815	815	819
13	820	821	825	820	809	804	809	815	817	817	818	816	815	814	811
14	811	815	818	812	790	768	769	783	797	803	806	808	804	797	799
15	797	799	802	797	789	779	777	780	787	793	796	799	799	799	797
16†	816	816	817	815	811	804	795	799	805	810	816	818	815	815	813
17	818	819	827	831	824	822	815	807	809	809	812	813	809	809	811
18	815	816	817	818	813	812	816	824	829	825	824	822	821	814	817
19	809	811	811	808	806	801	802	806	812	807	801	799	797	797	799
20	795	795	797	801	801	799	798	804	807	806	801	796	790	790	791
21	789	790	792	793	792	791	787	791	796	798	797	790	783	786	785
22	785	787	787	784	780	780	779	790	799	809	814	810	810	807	809
23§	815	817	820	821	822	815	810	817	823	823	824	825	820	§	§
24	795	798	807	807	798	791	793	802	812	815	814	811	806	807	811
25†	815	815	819	821	819	817	809	811	813	815	817	820	821	820	822
26§	827	826	828	829	822	§	§	§	§	§	§	§	§	787	789
27	804	803	810	817	815	809	804	810	814	814	816	818	819	817	817
28	825	825	825	825	821	823	829	838	**840**	837	835	829	828	829	829
29	833	835	836	833	829	826	826	832	838	834	833	829	829	829	825
30	829	828	828	827	826	820	820	829	824	825	830	824	810	819	823
31	815	817	818	815	809	805	799	804	807	805	805	806	800	799	798
Mean . .	810	812	**814**	811	803	797	**795**	800	807	811	814	813	809	808	808
Mean† . .	815	817	**817**	810	799	795	**794**	799	807	812	816	816	812	811	811

†Five international quiet days.
§V. F. Magnetograph under adjustment. The days have been omitted for means.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

SEPTEMBER. 17000 γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.).									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
826	829	832	834	835	836	837	837	837	806	23 18	839	4 58	742	1
830	832	833	834	835	835	835	835	835	**827**	1 30	**841**	6 30	795	2†
819	819	821	822	824	825	825	824	823	815	1 26	830	4 38	782	3
797	800	800	801	802	801	801	802	801	796	1 40	816	7 30	766	4
786	787	787	787	787	785	788	785	785	787	2 06	801	5 30	766	5
767	770	768	770	769	768	767	769	768	**766**	1 36	787	7 26	744	6
806	807	808	809	810	811	812	812	812	789	23 58	813	4 12	**741**	7
805	807	808	808	808	807	806	810	809	800	11 04	815	5 38	762	8
808	809	811	812	810	811	811	813	814	809	1 22	816	5 18	799	9
810	812	812	812	813	814	814	814	816	806	1 27	823	6 56	775	10
807	807	808	809	811	811	811	811	811	804	1 26	822	6 04	772	11
808	810	812	813	811	811	811	810	811	805	1 26	819	5 44	769	12
807	808	809	809	809	809	809	809	809	805	1 16	818	5 40	781	13
817	821	820	821	822	822	819	820	820	813	1 46	825	5 50	780	14
797	799	800	802	804	803	803	802	802	800	1 42	834	6 36	772	15
796	797	798	800	801	801	800	799	800	793	0 58	815	5 28	766	16
801	803	805	804	804	805	805	804	802	800	11 06	814	6 36	775	17
803	803	804	805	805	805	804	804	803	801	2 00	816	5 52	776	18†
794	793	794	795	795	794	794	793	793	794	1 46	809	5 44	765	19†
781	781	782	783	785	783	780	780	782	782	2 03	799	5 24	767	20
771	771	771	772	772	772	772	770	771	770	1 52	786	6 0	748	21
806	809	810	812	813	812	812	811	812	791	18 28	816	4 10	748	22
808	809	810	811	812	813	813	812	813	805	1 40	816	6 10	782	23
805	807	809	810	811	811	811	810	811	804	1 36	820	5 06	781	24
807	808	809	811	811	811	811	811	810	805	1 48	815	6 44	785	25
800	802	802	803	802	804	804	802	801	800	2 04	814	5 38	786	26
795	796	797	798	797	798	797	796	795	798	1 38	809	6 38	789	27
792	794	795	796	795	795	795	794	793	796	10 06	806	13 06	788	28†
808	809	811	813	813	813	814	813	811	798	21 16	814	6 22	758	29†
804	806	810	811	812	811	811	809	806	801	2 02	823	5 56	750	30
802	803	805	806	806	806	806	805	805	799					Mean.
806	807	808	810	810	809	809	809	809	803					Mean.†

OCTOBER.

814	812	815	815	817	818	816	815	815	809	2 03	829	5 58	**762**	1
821	816	823	823	823	821	821	821	818	817	19 38	827	6 18	793	2
811	811	813	812	812	812	811	810	810	809	1 26	827	6 57	784	3
799	800	802	803	803	800	798	798	799	801	2 09	817	6 24	786	4
793	795	794	795	792	791	794	793	793	794	1 51	809	7 00	785	5
779	779	780	781	781	781	781	781	781	**782**	1 51	797	5 56	764	6
817	818	819	821	821	822	822	821	821	806	17 41	822	6 31	777	7
818	819	819	820	820	819	819	819	819	818	2 00	827	5 40	803	8
809	809	810	810	811	811	810	810	810	807	1 50	820	2 04	782	9†
806	806	808	808	808	808	808	807	809	805	9 59	814	4 51	787	10†
813	815	816	817	816	816	815	815	815	809	10 18	823	4 22	774	11†
817	819	821	817	819	819	820	816	815	817	9 55	834	5 22	791	12
813	814	813	813	812	811	810	810	809	814	1 51	827	4 42	801	13
800	800	800	801	800	799	800	798	797	799	2 18	819	5 26	763	14
802	804	806	810	809	808	807	806	805	798	18 21	811	6 02	776	15
815	817	817	819	819	819	819	818	817	813	19 06	819	6 14	794	16†
813	815	816	818	819	820	820	818	814	816	3 10	831	7 14	805	17
818	822	822	821	821	821	820	817	816	819	3 13	831	4 34	809	18
801	802	803	802	803	800	803	799	799	803	1 22	814	12 30	794	19
793	793	794	794	793	792	791	790	790	796	7 30	808	12 13	788	20
787	788	788	787	787	787	785	785	783	789	9 37	799	12 10	780	21
811	812	815	813	814	815	814	814	814	803	17 22	815	4 18	776	22
§	§	§	§	§	§	§	789	794	..	..	..	..	..	23§
812	813	815	817	817	817	816	816	816	809	18 18	817	5 20	789	24
824	825	825	826	826	826	825	825	826	820	15 50	826	6 14	807	25†
793	796	799	801	804	804	803	803	804	..	..	..	..	..	26§
816	816	819	814	814	814	815	814	815	814	16 57	821	5 52	802	27
828	829	829	827	831	825	822	823	823	828	7 40	**841**	3 48	818	28
829	824	828	829	829	823	822	826	822	**829**	8 10	839	15 54	812	29
816	813	813	812	811	815	810	807	807	819	9 58	832	21 44	804	30
799	799	798	797	798	796	795	793	792	803	2 12	819	22 39	790	31
809	810	811	811	811	811	810	809	809	809					Mean.‡
813	814	815	815	815	815	814	814	814	811					Mean.†

* See footnote on page 113.

† Five international quiet days.

§ V. F. Magnetograph under adjustment. The days have been omitted for means.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

NOVEMBER. 17000 γ PLUS TABULAR QUANTITIES.

Date.	Hours (G. M. T.).														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
1	795	797	800	803	801	788	783	788	788	785	787	790	787	787	788
2	784	783	786	787	781	767	756	759	763	764	764	766	766	769	770
3	773	771	771	773	770	767	767	775	777	770	767	762	763	764	765
4	762	761	767	767	771	783	797	811	824	828	829	831	831	736	839
5	846	846	847	846	843	842	840	847	852	852	848	847	848	850	850
6	840	840	845	847	848	848	848	852	860	858	850	845	841	847	847
7	844	844	845	846	848	850	852	860	864	859	853	850	852	855	853
8	849	847	851	851	852	852	851	853	857	856	852	848	851	855	853
9	852	852	852	851	852	849	847	854	860	859	854	857	859	859	859
10	857	858	860	860	855	853	855	862	866	866	862	859	857	862	863
11	863	862	862	862	861	854	856	863	868	865	863	855	852	853	853
12†	851	851	851	847	839	835	838	842	848	850	849	847	841	841	842
13	844	841	845	848	845	836	829	831	834	836	840	839	833	835	837
14	837	833	832	837	838	838	837	837	839	834	832	832	834	832	827
15	831	829	827	832	832	829	823	825	821	825	827	828	824	823	822
16	822	819	823	827	825	819	813	809	817	815	815	818	816	815	818
17	817	816	813	814	814	810	808	816	827	828	829	827	823	820	819
18	808	810	807	807	805	802	805	814	822	825	821	818	815	813	812
19	801	801	797	801	805	805	808	812	817	817	817	814	813	810	809
20	797	797	797	798	795	796	806	820	834	838	839	841	841	842	844
21†	841	842	841	845	845	841	844	849	850	847	844	842	841	844	845
22†	843	842	840	845	849	843	844	852	856	853	849	851	852	851	852
23	848	848	847	851	846	847	849	853	855	854	853	852	848	848	849
24	844	844	846	850	847	845	844	843	843	844	845	845	843	841	841
25	832	829	829	835	836	836	833	433	836	834	830	829	827	828	829
26	818	818	816	821	816	813	814	816	819	819	821	820	822	819	813
27	811	813	811	812	809	803	803	807	808	809	806	807	804	804	804
28†	801	798	797	797	797	796	801	804	811	816	818	817	812	812	813
29	816	817	819	818	818	820	821	827	832	828	825	823	821	823	823
30†	823	823	821	823	828	832	835	832	830	831	830	829	826	824	824
Mean .	825	824	825	827	826	823	823	828	833	832	831	829	828	829	829
Mean† .	834	833	831	833	833	830	833	837	840	840	838	837	834	834	835

DECEMBER.

1	826	824	823	827	827	819	814	819	825	826	829	828	825	825	819
2	817	817	815	820	818	820	823	827	833	832	825	820	823	817	817
3	806	806	809	809	814	816	811	810	819	825	820	817	815	813	810
4	803	803	804	804	808	806	808	813	819	814	809	811	810	811	809
5	805	804	807	809	814	817	818	820	820	819	817	818	822	821	818
6	826	824	825	829	833	832	834	840	845	841	835	838	842	837	835
7	841	841	841	840	840	842	844	848	849	846	840	840	841	842	843
8	841	841	841	844	845	843	844	843	845	846	843	841	840	841	840
9	834	835	834	836	835	831	832	842	847	845	839	837	831	832	832
10	828	827	824	825	828	825	829	828	832	832	831	823	817	821	821
11	823	822	819	820	821	821	823	827	836	833	826	820	821	824	823
12	828	828	825	830	833	826	821	829	836	842	844	836	832	828	829
13	828	826	825	824	822	818	819	824	828	828	823	819	817	818	819
14	814	813	813	814	805	799	805	814	817	816	815	810	806	805	804
15	805	802	800	805	805	805	807	812	815	816	814	814	814	817	815
16	820	819	818	816	814	815	815	814	817	817	815	817	815	817	818
17	829	826	828	830	832	835	828	826	828	831	831	831	827	826	824
18	825	824	821	826	830	828	819	815	817	822	826	823	819	817	818
19†	820	819	816	818	822	819	815	812	817	821	820	821	817	816	816
20†	821	820	819	822	827	759	762	769	775	783	787	793	796	800	805
21†	819	819	818	824	829	832	834	837	833	834	831	828	827	829	829
22	833	831	828	834	839	837	830	825	831	836	837	836	834	835	834
23	823	823	821	825	821	812	809	805	807	813	818	821	820	820	820
24	808	808	805	808	810	805	805	807	812	818	817	813	812	811	811
25	801	800	800	802	813	815	812	805	806	809	801	800	801	804	805
26†	797	798	797	804	809	809	803	797	798	799	800	801	801	798	799
27†	791	790	789	791	791	793	802	809	818	828	830	835	836	835	837
28	836	836	834	839	848	849	842	843	849	848	847	846	845	845	846
29	842	844	841	845	852	853	853	845	852	858	860	853	845	849	852
30	842	843	844	849	847	836	833	835	836	844	846	846	843	843	845
31	835	836	836	837	833	822	820	828	836	843	843	840	835	837	837
Mean .	821	821	820	823	825	821	820	821	825	828	826	825	823	824	823
Mean† .	815	814	812	816	820	807	806	807	810	814	815	816	815	815	816

†Five international quiet days.

(Averages for periods of sixty minutes centred at the full hours of Greenwich mean time.)

NOVEMBER. 17000 γ PLUS TABULAR QUANTITIES.

Hours (G. M. T.).									Mean.*	Maximum.		Minimum.		Date.
15	16	17	18	19	20	21	22	23		Time.	Mag.	Time.	Mag.	
γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	H. M.	γ	H. M.	γ	
788	788	787	785	785	784	783	781	779	788	3 16	803	22 50	777	1
770	771	768	770	769	770	769	768	767	770	2 39	788	5 54	754	2
764	763	763	765	764	761	759	760	759	766	7 52	778	23 30	757	3
840	841	842	843	844	845	845	844	844	819	19 42	845	0 34	758	4
851	853	851	852	849	849	851	851	849	848	16 48	856	5 47	838	5
849	850	849	851	850	850	849	850	851	849	7 42	861	0 46	838	6
855	855	855	856	856	855	855	854	854	853	7 41	865	1 12	841	7
853	855	856	855	855	855	852	856	856	853	7 57	860	1 10	843	8
857	858	860	862	861	860	861	859	859	857	18 06	862	6 18	846	9
864	864	864	866	865	864	864	862	861	861	7 30	867	0 25	856	10
853	853	854	854	854	852	850	849	850	856	8 00	869	22 18	848	11
841	842	842	842	841	840	840	839	837	843	0 04	851	5 10	834	12†
837	838	839	840	841	839	838	837	836	838	3 32	849	5 58	828	13
832	832	833	836	834	835	833	831	829	834	7 58	841	13 50	825	14
823	822	823	825	821	821	821	819	818	825	3 37	835	22 36	815	15
820	819	817	821	819	817	815	818	816	818	3 26	828	7 02	803	16
820	818	818	820	822	818	818	818	818	819	10 10	830	5 48	805	17
809	813	811	813	814	812	812	810	811	812	9 00	827	5 23	800	18
809	808	808	808	809	809	811	809	807	809	8 44	818	2 23	795	19
845	846	847	848	848	847	848	848	849	831	22 56	849	3 52	793	20
844	845	845	845	846	845	844	844	844	844	7 26	851	5 26	840	21†
852	852	854	854	853	852	852	851	850	850	8 02	857	1 38	839	22†
850	850	850	850	850	850	849	850	850	850	8 22	855	1 50	844	23
841	841	840	841	840	838	837	837	835	842	3 10	850	23 36	834	24
827	826	827	827	826	825	823	821	820	829	3 46	839	23 54	818	25
815	815	818	819	820	818	817	815	815	817	12 24	828	13 56	809	26
804	804	805	804	803	801	804	803	802	806	8 50	815	22 27	796	27
814	816	817	818	818	818	818	817	817	810	19 12	819	4 58	794	28†
823	823	825	825	826	825	825	824	823	823	8 02	832	5 00	819	29
824	824	825	826	825	826	824	824	823	826	5 44	835	1 46	819	30†
829	829	830	831	830	829	829	828	828	828					Mean.
835	835	836	836	836	835	834	833	833	835					Mean.†

DECEMBER.

819	823	823	825	824	824	825	824	823	823	10 22	830	6 26	812	1
815	817	818	819	819	816	820	817	811	820	8 20	835	23 58	809	2
809	807	809	808	808	806	806	806	805	811	8 54	830	19 48	801	3
809	808	804	804	806	804	805	803	803	807	8 26	822	22 06	800	4
820	819	820	823	824	824	823	823	825	818	12 34	828	1 04	801	5
838	840	842	841	841	842	840	839	838	837	8 06	847	1 22	823	6
843	842	841	841	839	838	838	838	837	841	8 08	854	20 42	837	7
841	839	838	838	837	836	835	835	834	840	9 00	846	23 08	833	8
832	830	831	830	828	827	825	824	823	833	8 10	848	23 59	821	9
820	820	820	820	820	819	817	816	816	823	7 54	837	23 58	813	10
821	821	822	823	828	823	823	823	818	823	8 24	836	23 24	816	11
829	828	828	828	828	829	828	829	825	830	9 46	846	6 02	820	12
817	816	815	817	817	817	814	815	811	819	7 38	830	22 52	810	13
803	801	803	802	801	801	801	799	797	806	7 41	818	22 42	795	14
815	814	815	817	816	817	818	819	814	813	22 10	820	2 02	798	15
816	817	817	819	818	817	818	815	814	817	14 14	820	4 10	811	16
824	824	824	825	825	823	822	821	820	827	4 50	838	22 30	819	17
817	816	815	816	816	816	815	814	815	819	4 20	831	23 50	813	18
815	815	815	815	815	815	815	813	813	817	4 10	822	6 44	810	19†
806	808	809	811	811	811	812	812	812	801	3 56	828	5 06	759	20†
830	829	829	830	830	829	829	828	828	829	7 00	837	1 46	816	21†
833	833	832	831	831	830	829	827	827	832	4 20	840	6 30	822	22
818	819	821	822	822	821	822	818	815	818	3 16	826	7 18	804	23
810	810	810	810	809	808	806	805	805	809	9 16	819	2 02	803	24
805	804	805	803	801	803	801	800	800	804	4 42	817	2 08	796	25
798	797	798	798	798	796	795	795	795	799	4 40	810	1 44	794	26†
838	839	840	841	841	840	840	839	839	823	18 36	842	1 46	789	27†
845	845	846	845	843	844	845	846	844	844	4 30	853	2 00	831	28
848	849	849	845	847	847	847	845	844	849	9 42	861	1 58	838	29
842	841	840	840	839	837	837	838	836	841	3 42	851	5 14	831	30
837	834	834	833	832	832	835	833	832	834	9 26	846	5 34	817	31
823	823	823	823	823	822	822	821	820	823					Mean.
816	816	816	816	816	815	814	813	812	814					Mean.†

*See foot note on page 113.
†Five international quiet days.

At Colaba, a day is classed as (1) a quiet day, or a day of (2) small, (3) moderate, (4) great or (5) very great disturbance, the letters for distinguishing each class being C, S, M, G. and VG respectively. For representing intermediate conditions of activity of the smaller period movements, sub-classifications Ca, Sa and Ma are used. Roughly speaking a storm having a range over 225 γ in the variation of the horizontal force during the first twenty-four hours after its commencement is classed as " Very Great ". It is " Great " if the range is between 150 γ and 225 γ, "Moderate" if the range is between 65 γ and 150 γ and " Small " if the range is less than 65 γ. The range is however not the only criterion used in assigning the character of a storm. The oscillations in the magnetograms are duly taken into account in determining the class to which a particular storm should belong. During the year there were 2 days of " Great ", 31 of " Moderate " and 115 of " Small " disturbances. No storm of " Very Great " intensity was recorded during the year. The following table gives a list of principal disturbances recorded during the year. Of the smaller disturbances, only those which showed special features have been included in this table.

PRINCIPAL MAGNETIC DISTURBANCES, 1931.

Date.	Time of beginning. G. M. T.	Duration in hours.	Horizontal force during storm.				Range	Relative magnitude.	Remarks.
			Maximum.		Minimum.				
			Time.	Magnitude.	Time.	Magnitude.			
	H. M.		D. H. M.	γ	D. H. M.	γ	γ		
January 8	22 30	49	9 6 51	37353	9 22 50	37272	81	Sa	Commencement gradual.
„ 15	10 30	87	16 7 27	37340	17 12 2	37183	157	M	Do.
„ 25	0 8	47	25 6 10	37359	26 1 6	37272	87	S	Commencement sudden.
February 13	8 58	66	13 12 14	37398	15 15 38	37265	133	Ma	Do.
„ 24	4 13	67	24 4 51	37351	24 18 26	37187	164	G	Do.
March 8	6 5	19	8 6 19	37369	8 18 34	37298	71	S	Do.
„ 12	6 30	67	12 7 4	37369	12 20 26	37285	84	S	Commencement gradual.
„ 20	16 25	30	21 6 50	37376	21 13 6	37266	110	M	Commencement sudden.
„ 25	17 30	24	26 5 15	37341	25 20 6	37283	58	S	Commencement gradual.
April 1	17 30	7	1 19 16	37321	1 18 40	37285	36	S	Do.
„ 3	12 30	38	4 7 38	37338	3 20 44	37271	67	S	Do.
„ 9	6 30	63	9 7 6	37363	11 14 10	37283	80	S	Do.
„ 19	10 30	34	19 14 32	37342	20 10 34	37235	107	M	Do.
May 6	4 30	56	6 6 42	37386	7 14 10	37266	120	M	Do.
„ 11	2 30	29	11 5 38	37363	11 19 42	37286	77	S	Do.
„ 13	16 30	65	14 6 30	37343	15 5 2	37280	63	Sa	Do.
„ 25	16 30	33	26 5 58	37375	26 17 6	37298	77	S	Do.
June 1	15 30	48	1 16 50	37353	2 11 50	37255	98	M	Commencement sudden.
„ 8	13 30	19	8 19 58	37329	9 3 50	37275	54	S	Commencement gradual.
„ 21	14 34	10	21 18 18	37347	21 14 35	37322	25	S	Commencement sudden
„ 26	14 58	78	26 15 3	37372	27 15 54	37287	85	Sa	Do.
July 23	3 22	90	23 6 16	37415	25 13 26	37260	155	Ma	Do.
„ 27	22 30	27	28 5 43	37365	28 11 40	37287	78	M	Commencement gradual.
August 6	23 30	72	7 4 49	37380	7 14 7	37285	95	M	Do.
„ 19	13 22	59	20 4 26	37343	20 11 20	37273	70	M	Commencement sudden.
„ 24	3 30	44	24 5 59	37354	25 13 8	37282	72	Sa	Commencement gradual.
September 3	4 30	44	3 8 30	37403	4 13 16	37256	147	M	Do.
„ 6	6 30	41	7 9 24	37352	6 12 40	37246	106	M	Do.
„ 8	5 30	29	8 7 11	37352	8 20 6	37290	62	S	Do.
„ 14	9 30	86	15 6 12	37367	15 15 9	37251	116	M	Do.
„ 20	11 30	46	21 5 50	37343	20 20 6	37279	64	Sa	Do.
„ 30	4 30	77	30 8 10	37375	30 14 40	37245	130	M	Do.
October 4	6 30	45	4 6 44	37369	5 8 46	37273	96	Sa	Do.
„ 12	10 30	32	12 12 32	37338	12 16 53	37273	65	Sa	Do.
„ 17	3 30	69	17 4 16	37417	18 11 36	37290	127	M	Commencement sudden.
„ 27	10 30	36	28 5 54	37363	28 20 6	37266	97	M	Commencement gradual.
„ 29	6 30	41	29 6 38	37350	29 14 37	37097	253	G	Do.
„ 31	3 30	20	31 17 42	37321	31 8 18	37281	40	Sa	Do.
November 5	3 30	138	5 5 55	37368	8 10 36	37279	89	M	Do.
„ 13	0 30	167	13 5 50	37402	16 16 26	37290	112	Sa	Commencement sudden.
„ 25	19 42	52	26 4 32	37412	26 15 18	37217	195	Ma	Do.
December 2	8 44	88	5 4 42	37361	5 14 6	37291	70	M	Do.
10	1 30	12	10 5 20	37403	10 11 2	37306	97	Sa	Commencement gradual.
„ 11	11 30	37	11 12 55	37369	12 11 52	37295	74	Sa	Do.
„ 25	1 0	24	25 4 55	37389	25 18 30	37311	78	Sa	Commencement sudden.
„ 28	6 30	67	28 10 33	37382	28 18 30	37280	102	M	Commencement gradual.

Fourier analysis of the diurnal and annual variations of Horizontal Force for the five International quiet days during 1931.

Diurnal variation: $\triangle H = c_1 \sin(\theta + \varphi_1) + c_2 \sin(2\theta + \varphi_2) + \ldots\ldots$; θ is counted at the rate of 15° per hour from midnight to midnight (G. M. T.).

Annual variation: $\triangle H = c_1 \sin(\theta + \varphi_1) + c_2 \sin(2\theta + \varphi_2) + \ldots\ldots$; θ is counted at the rate of 30° per average month.

Quantity.	Diurnal Variation.												Annual Variation.
	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.	
	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ	γ
c_1	10·5	12·0	18·1	18·7	16·1	15·1	15·2	12·0	12·8	14·9	16·2	11·9	8·2
c_2	4·7	5·0	9·7	8·4	8·1	7·8	8·0	8·7	7·1	9·4	9·1	5·6	3·0
c_3	2·1	3·0	5·2	3·2	1·9	1·8	2·0	4·1	4·5	3·9	3·5	1·3	2·3
c_4	1·7	1·6	1·5	2·1	0·3	0·7	0·3	1·2	1·1	2·0	1·8	0·4	2·0
c_1/c_2	2·2	2·4	1·9	2·2	2·0	1·9	1·9	1·4	1·8	1·6	1·8	2·1	2·7
	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	° ′	°
φ_1	359 41	338 56	347 46	348 15	353 21	350 36	357 36	338 25	339 51	3 26	13 23	349 25	28 21
φ_2	259 52	236 41	242 47	240 18	244 21	245 14	252 50	213 36	225 3	242 52	257 28	247 21	121 37
φ_3	164 37	136 21	154 31	176 17	153 18	113 44	136 36	126 24	137 59	174 1	183 6	130 16	320 2
φ_4	58 14	27 3	31 46	96 35	123 11	277 48	311 34	38 9	44 15	121 40	167 32	105 7	154 19

Mean values for periods of sixty minutes centred at the full hours of Greenwich Mean Time.

Date.	January.				February.				March.			
	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.
1	109	111	110	229	176	61	110	154	333	81	92	134
2	95	144	85	167	363	56	84	77	313	46	87	118
3	113	55	111	177	277	58	115	171	151	53	96	319
4	124	144	112	155	334	34	66	142	236	15	165	224
5	143	127	115	165	179	51	98	105	287	73	85	175
6	101	262	76	144	165	159	51	33	187	85	70	74
7	101	264	109	132	76	86	62	23	176	107	..	..
8	330	65	143	92	66	42	76	200	..	..	129	105
9	202	110	133	145	285	75	71	71	87	100	100	85
10	265	121	158	174	216	92	145	74	111	114	100	132
11	299	155	169	90	361	74	100	97	123	..	111	117
12	188	..	152	353	345	66	93	106	88	87	94	134
13	243	56	123	260	133	78	66	32	98	70	59	79
14	143	121	..	..	275	77	110	142	187	62	89	75
15	..	..	141	220	264	55	83	70	191	90	101	147
16	167	67	109	149	18	110	99	17	279	92	124	83
17	208	78	133	232	24	189	105	33	163	94	220	85
18	305	125	144	133	120	79	112	152	280	22	85	73
19	273	68	122	172	286	61	128	67	27	..	63	43
20	309	77	203	171	67	56	76	17	54	57	104	52
21	320	77	99	143	29	133	55	24	111	70	52	65
22	174	45	99	187	125	77	52	22	219	43	77	94
23	374	65	77	140	56	66	70	29	258	49	59	119
24	159	46	56	149	32	1	77	66	70	56	..	..
25	185	67	97	187	24	66	55	89	..	..	56	50
26	335	55	83	121	224	49	66	57	48	53	69	34
27	200	64	131	54	209	71	109	90	164	50	59	111
28	144	65	93	44	330	..	308	770	363	55	73	49
29	88	47	95	44					76	66	59	29
30	132	66	99	141					..	..	79	..
31	153	66	78	206					..	41	59	26
Mean (*a*)	199	97	115	159	181	75	94	105	173	67	91	101
Mean (*b*)	199	97	115	159	181	75	94	105	173	67	91	101
	Mean (*a*) 143 ; Mean (*b*) 143.				Mean (*a*) 114 ; Mean (*b*) 114.				Mean (*a*) 108 ; Mean (*b*) 108.			

Date.	July.				August.				September.			
	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.
1	77	—44	—52	110	..	99	136	206	82	55	..	77
2	—30	—501	135	177	159	89	140	160	84	44	110	..
3	142	122	..	..	155	121	109	137	..	110	95	111
4	..	109	109	40	90	111	89	117	66	42	85	107
5	90	15	286	330	122	..	107	177	110	106	55	55
6	31	79	79	54	122	144	149	182	99	100	94	71
7	—207	26	75	40	..	..	—50	—342	94	94	100	..
8	101	82	81	52	88	61	55	146	77	76	100	39
9	97	—10	73	56	127	118	162	168	148	88	..	133
10	108	—303	117	150	168	113	154	171	113	72	83	121
11	33	144	137	156	143	143	143	..	..	63	77	49
12	122	104	150	62	..	137	134	137	53	50	..	63
13	..	99	121	40	125	111	122	137	78	27	85	96
14	129	204	95	—75	117	122	113	..	107	70	67	66
15	125	—45	75	56	92	108	..	137	116	77	..	119
16	26	153	111	112	81	101	107	112	110	55	74	45
17	160	166	155	62	99	86	95	97	179	66	69	..
18	103	150	107	122	85	125	112	122	69	38	—303	176
19	95	137	137	213	129	125	127	137	97	94	151	80
20	—27	190	157	164	57	75	105	137	44	28	78	79
21	125	138	112	164	..	185	122	100	296	110	325	209
22	109	114	127	136	109	108	111	68	113	77	72	67
23	140	133	128	72	95	125	119	103	96	73	110	99
24	156	147	151	147	52	108	63	56	85	85	89	88
25	128	57	—18	101	59	68	56	43	82	77	80	81
26	128	155	112	90	27	75	66	73	73	83	99	75
27	88	101	73	64	73	89	98	29	..	..	105	110
28	114	90	101	156	100	71	84	99	109	80	105	119
29	138	..	169	206	..	105	21	67	71	84	110	..
30	..	120	101	101	63	89	61	83	..	63	66	55
31	—68	71	137	176	80	113	94	58				
Mean (*a*)	107	116	122	118	101	108	105	116	102	72	99	92
Mean (*b*)	80	67	111	111	101	108	100	101	102	72	84	92
Mean for day	Mean (*a*) 116 ; Mean (*b*) 92.				Mean (*a*) 107 ; Mean (*b*) 103.				Mean (*a*) 91 ; Mean (*b*) 87.			
Mean of monthly hourly means.	Hours G. M. T.											
	0	1	2	3	4	5	6	7	8	9	10	11
Wet Period May to October.	84	84	94	120	93	87	80	89	80	87	91	74
Dry Period November to April.	117	125	133	149	144	135	120	104	93	90	85	81

(*a*) Mean from all positive readings.
(*b*) Mean from all complete days using both positive and negative readings.

Mean values for periods of sixty minutes centred at the full hours of Greenwich Mean Time.

April.				May.				June.				Date.
3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.	
60	52	43	13	66	67	63	61	69	60	154	144	1
199	255	53	98	89	55	88	126	125	47	73	55	2
176	46	60	53	100	83	84	147	72	77	104	93	3
188	52	52	122	165	90	95	82	80	77	83	104	4
175	47	46	66	117	105	117	82	89	85	96	107	5
103	94	118	46	183	70	113	52	98	92	85	84	6
101	109	129	84	112	94	117	111	77	72	72	75	7
96	94	86	59	82	67	111	129	69	72	84	86	8
123	70	81	61	29	80	95	97	91	83	89	91	9
118	64	100	93	69	88	105	74	83	74	89	76	10
84	55	105	68	63	85	111	87	..	88	96	88	11
299	67	53	45	70	79	76	82	117	69	108	103	12
187	65	67	27	75	76	99	94	1719	..	129	52	13
98	69	59	70	93	83	108	64	1592	1102	78	91	14
85	82	91	159	89	82	105	83	111	..	105	63	15
128	94	89	35	67	64	98	50	35	78	83	93	16
82	59	87	129	65	55	85	66	70	81	102	60	17
132	65	123	95	66	60	78	49	52	77	85	67	18
76	52	123	105	59	56	69	53	67	77	89	73	19
214	44	100	61	65	66	82	60	34	55	87	82	20
196	59	61	69	117	82	89	57	1239	3	—21	96	21
135	90	108	104	65	91	93	60	86	79	88	101	22
111	61	51	117	53	85	123	64	75	66	87	102	23
76	77	61	83	89	80	84	46	69	67	80	67	24
51	61	81	31	97	108	123	77	104	89	55	89	25
76	35	79	54	84	99	94	74	188	74	119	85	26
287	—132	96	91	70	84	105	66	133	67	90	89	27
173	59	74	86	79	96	95	76	..	103	115	169	28
59	65	67	79	140	70	97	81	23	104	74	84	29
111	75	73	50	100	58	97	87	89	55	85	27	30
				241	57	105	79					31
133	73	81	75	92	78	97	78	238	110	93	87	Mean (*a*)
133	66	81	75	92	78	97	78	238	110	89	87	Mean (*b*)
Mean (*a*) 91 ; Mean (*b*) 89.				Mean (*a*) 86 ; Mean (*b*) 86.				Mean (*a*) 132 ; Mean (*b*) 131.				

October.				November.				December.				Date.
3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.	3 h.	9 h.	15 h.	21 h.	
74	67	..	—56	81	92	123	63	109	169	67	173	1
84	57	101	49	—56	1183	109	96	82	105	120	96	2
121	..	..	121	104	93	95	121	21	79	142	110	3
121	94	138	67	100	56	140	129	99	104	138	63	4
91	83	128	91	203	69	140	99	98	..	235	115	5
178	110	117	32	111	109	163	190	99	92	141	169	6
..	..	..	..	113	126	107	158	113	114	169	184	7
..	..	89	88	74	160	126	141	159	242	100	232	8
149	102	132	105	91	119	384	106	135	163	135	149	9
71	74	81	55	146	205	105	160	232	227	149	227	10
67	72	25	25	176	101	215	114	130	123	..	..	11
61	—360	88	118	99	70	79	92	114	44	15	19	12
272	168	96	608	115	187	107	149	18	57	129	103	13
128	87	99	58	94	139	129	85	69	54	48	37	14
96	49	60	74	134	75	101	105	32	..	133	128	15
45	—61	..	..	86	142	126	187	114	74	56	24	16
78	88	35	31	111	139	134	138	188	234	152	196	17
38	77	23	7	118	157	149	126	125	78	182	145	18
218	66	121	110	79	121	196	135	149	203	149	154	19
94	43	106	126	111	46	181	135	126	70	112	115	20
110	55	121	106	123	103	176	131	229	79	135	149	21
89	84	193	154	114	78	174	129	99	72	132	83	22
117	277	144	171	101	111	151	170	112	200	91	175	23
119	171	129	154	146	96	140	158	70	139	119	135	24
94	119	100	127	130	62	161	172	112	61	135	165	25
78	100	83	119	58	166	130	92	86	86	247	161	26
69	60	96	149	112	104	58	33	142	55	132	184	27
..	72	127	140	63	85	98	104	126	171	134	..	28
127	99	171	110	111	54	132	100	212	68	84	156	29
143	54	110	169	115	104	120	195	227	65	97	156	30
71	39	107	93	..	..	..	..	96	80	106	128	31
107	91	104	116	111	145	142	127	120	114	126	136	Mean (*a*)
107	69	104	110	105	145	142	127	120	114	126	136	Mean (*b*)
Mean (*a*) 105 ; Mean (*b*) 97.				Mean (*a*) 131 ; Mean (*b*) 130.				Mean (*a*) 124 ; Mean (*b*) 124.				Mean for day
Hours G. M. T.												Mean of monthly hourly means.
12	13	14	15	16	17	18	19	20	21	22	23	
89	86	91	100	99	100	91	90	99	94	85	80	Wet Period May to October.
88	97	104	107	118	132	133	131	121	120	101	100	Dry Period November to April.

(*a*) Mean from all positive readings.
(*b*) Mean from all complete days using both positive and negative readings.

Colaba Observatory.

φ=18° 53′ 36″ N.; γ=72° 48′ 54″ E.; h=6 metres. Subsoil—Trap-rock.

Apparatus.—(*i*) Milne-Shaw Seismograph (N.-S. Component). Damping ratio-20 : 1.

(*ii*) Milne-Shaw Seismograph (E.-W. Component). Damping ratio-22 : 1.

(In the underground constant temperature room.)

Component.	V	To	ε
AN . .	250	12 Sec.	2·6
AE . .	350	12 Sec.	2·6

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE.	Remarks.
1931.	AN	H. M. S.				
Jan. 2	P	0 0 57	..	..	..	
	S	0 7 42	..	..	..	
	L	0 15 57	..	..	..	
	M	0 19 57	18	12	..	
	F	1 20 0	..	..	..	
	AE					
,, ,,	P	0 0 57	..	..	..	
	S	0 7 42	..	..	..	
	L	0 15 57	..	..	..	
	M	0 24 42	18	..	6	
	F	1 3 0	..	..	..	
	AN					
,, ,,	P	10 8 36	..	..	..	
	S	10 21 13	..	..	..	
	L	10 52 56	..	..	..	
	M	11 18 18	20	11	..	
	F	13 24 0	..	..	..	
	AE					
,, ,,	P	10 8 36	..	..	..	
	S	10 21 13	..	..	..	
	L	10 52 56	..	..	..	
	M	11 11 4	24	..	8	
	F	13 24 0	..	..	..	
	AN					
,, 4	P	4 49 5	..	..	..	
	S	4 53 33	..	..	..	
	L	4 56 53	..	..	..	
	M	4 58 11	9	3	..	
	F	5 47 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE.	Remarks.
1931—*contd.*		H. M. S.				
	AE					
Jan. 4	P	4 49 5	..	..	..	
	S	4 53 33	..	..	..	
	L	4 56 53	..	..	..	
	M	5 0 18	7	..	1	
	F	5 47 0	..	..	..	
	AN					
,, ,,	Pe	23 33 57	..	..	..	Very feeble shock.
5	f	0 20 0	..	..	..	
	AE					
,, 4	Pe	23 33 57	..	..	..	Do.
5	F	0 23 0	..	..	..	
	AN					
,,	P	13 17 41	..	..	..	Feeble shock.
	F	13 45 0	..	..	..	
	AE					
,, ,,	P	13 17 41	..	..	..	Do.
	F	13 45 0	..	..	..	
	AN					
,, 7	P	2 8 16	..	..	..	
	S	2 11 55	..	..	..	
	L	2 14 12	..	..	..	
	M	2 15 58	7	3	..	
	F	2 53 0	..	..	..	
,, ,,	AE	Record lost due to failure of light.				
	AN					
,, ,,	P	3 53 24	..	..	..	Very feeble shock.
	F	4 8 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE.	Remarks.
1931—*contd.*		H. M. S.				
	AE					
Jan. 7	P	3 53 24	..	..	..	Very feeble shock.
	F	4 8 0	..	..	..	
	AN					
„ 9	Pe	9 26 0	..	..	..	Do.
	F	9 42 0	..	..	..	
	AE					
„ „	Pe	9 26 0	..	..	..	Do.
	F	9 42 0	..	..	..	
	AN					
„ 11	P	22 23 52	..	..	..	Do.
	F	22 55 0	..	..	..	
	AE					
	P	22 23 52	..	..	..	Do.
	F	22 55 0	..	..	..	
	AN					
„ 12	e	15 14 0	..	..	..	Tremors.
	f	15 44 0	..	..	..	
	AE					
„ „	e	15 14 0	..	..	..	Do.
	f	15 44 0	..	..	..	
	AN					
„ „	P	20 45 50	..	..	..	
	S	20 55 35	..	..	..	
	L	21 13 42	..	..	..	
	M	21 18 12	18	9	..	
	F	22 20 0	..	..	..	
	AE					
„ „	P	20 45 50	..	..	..	
	S	20 55 35	..	..	..	
	L	21 13 42	..	..	..	
	M	21 22 30	20	..	6	
	F	22 20 0	..	..	..	
	AN					
„ 14	P	17 10 11	..	..	..	Very feeble shock.
	F	17 44 0	..	..	..	
„ „	AE					
	P	17 10 11	..	..	..	Do.
„ „	F	17 44 0	..	..	..	
	AN					
„ 15	P	2 10 13	..	..	..	
	S	Lost during shifting time.				
	L	3 5 52	..	..	..	
	M	3 19 42	23	333	..	
	F	5 54 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE.	Remarks.
1931—*contd.*		H. M. S.				
	AE					
Jan. 15	P	Lost due to failure of light.			..	
	S	Lost during shifting time.			..	
	L	3 5 52	..	..	..	
	M	3 17 35	25	..	183	
	F	5 48 0	..	..	..	
	AN					
„ „	P	21 10 39	..	..	..	
	S	21 17 51	..	..	..	
	L	21 27 59	..	..	..	
	M	21 33 39	15	11	..	
	F	22 38 0	..	..	..	
„ „	AE	Record disturbed by insect.			..	
	AN					
	P	22 54 30	..	..	..	
	S	23 3 58	..	..	..	
	L	23 20 59	..	..	..	
	M	23 28 27	19	8	..	
„ 16	F	0 49 0	..	..		
„ 15	AE	Record disturbed by insect.			..	
	AN					
„ 16	e	1 44 0	..	..	..	Tremors.
	f	2 6 0	..	..	..	
„ „	AE	Record disturbed by insect.			..	
	AN					
	P	19 39 30	..	..	..	
	S	19 52 53	..	..	..	
	L	20 28 11	..	..	..	
	M	20 44 43	25	9	..	
	F	21 43 0	..	..	..	
	AE					
„ „	P	19 39 30	..	..	..	
	S	19 52 53	..	..	..	
	L	20 28 11	..	..	..	
	M	20 47 1	25	..	9	
	F	21 43 0	..	..	..	
	AN					
„ 17	P	3 12 1	..	..	..	
	S	3 25 22	..	..	..	
	L	4 0 14	..	..	..	
	M	4 15 32	20	11	..	
	F	5 13 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE.	Remarks.
1931—*contd.*		H. M. S.				
	AE					
Jan. 17	P	3 12 1	..	..	..	
	S	3 25 22	..	..	..	
	L	4 0 14	..	..	..	
	M	4 14 22	20	..	8	
	F	5 13 0	..	..	..	
	AN					
,, 18	P	4 38 15	..	..	..	
	S	4 40 13	..	..	..	
	L	4 41 0	..	..	..	
	M	4 42 59	5	2	..	
	F	4 58 0	..	..	..	
	AE					
,, 18	P	4 38 15	..	..	..	
	S	4 40 13	..	..	..	
	J	4 41 0	..	..	..	
	M	4 43 13	5	..	1	
	F	4 58 0	..	..	..	
	AN					
,, ,,	P	13 19 16	..	..	..	
	S	13 21 8	..	..	..	
	L	13 21 44	..	..	..	
	M	13 30 40	7	2	..	
	F	14 55 0	..	..	..	
	AE					
,, ,,	P	13 19 16	..	..	..	
	S	13 21 8	..	..	..	
	L	13 21 44	..	..	..	
	M	13 30 33	9	..	2	
	F	14 55 0	..	..	..	
	AN					
,, 19	P	12 34 15	..	..	..	
	S	12 42 15	..	..	..	
	L	12 55 18	..	..	..	
	M	13 0 56	18	4	..	
	F	13 49 0	..	..	..	
	AE					
,, ,,	P	12 34 15	..	..	..	
	S	12 42 15	..	..	..	
	L	12 55 18	..	..	..	
	M	13 0 28	17	..	4	
	F	13 49 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE.	Remarks.
1931—*contd.*		H. M. S.				
	AN					
Jan. 19	P	16 21 23	..	..	..	
	S	16 29 32	..	..	..	
	L	16 42 8	..	..	..	
	M	16 51 1	18	4	..	
	F	17 17 0	..	..	..	
	AE					
,, ,,	P	16 21 23	..	..	..	
	S	16 29 32	..	..	..	
	L	16 42 8	..	..	..	
	M	16 47 15	17	..	2	
	F	17 17 0	..	..	..	
	AN					
,, 20	P	9 31 18	..	..	..	
	S	9 34 39	..	..	..	
	L	9 36 33	..	..	..	
	M	9 39 0	7	10	..	
	F	10 28 0	..	..	..	
	AE					
,, ,,	P	9 31 18	..	..	..	
	S	9 34 39	..	..	..	
	L	9 36 33	..	..	..	
	M	9 36 52	6	..	15	
	F	10 28 0	..	..	..	
	AN					
,, ,,	P	15 32 32	..	..	..	
	S	15 35 59	..	..	..	
	L	15 37 22	..	..	..	
	M	15 39 42	7	9	..	
	F	16 31 0	..	..	..	
	AE					
,, ,,	P	15 32 32	..	..	..	
	S	15 35 59	..	..	..	
	L	15 37 22	..	..	..	
	M	15 39 45	8	...	6	
	F	16 31 0	..	..	..	
	AN					
,, ,,	P	23 52 11	..	..	..	
	S	23 58 36	..	..	..	
,, 21	L	0 6 6	..	..	..	
	F	0 57 0	..	..	..	
	AE					
,, 20	P	23 52 11	..	..	..	
	S	23 58 36	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE.	Remarks.
1931—*contd.*		H. M S.				
	AE					
Jan. 21	L	0 6 6	..	..	..	
	F	0 57 0	..	..	..	
	AN					
„ 24	P	13 50 18	..	..	..	
	S	13 58 3	..	..	..	
	L	14 8 48	..	..	..	
	M	14 17 51	17	5	..	
	F	15 41 0	..	..	..	
	AE					
„ „	P	13 50 18	..	..	..	
	S	13 58 3	..	..	..	
	L	14 8 48	..	..	..	
	M	14 17 28	15	..	6	
	F	15 41 0	..	..	..	
	AN					
„ „	e	18 36 42	..	..	..	
	M	19 11 12	18	4	..	
	f	20 1 0	..	..	..	
	AE					
„ „	e	18 36 42	..	..	..	
	M	19 7 55	18	..	4	
	f	20 1 0	..	..	..	
	AN					
„ 26	P	4 18 16	..	..	..	
	S	4 21 30	..	..	..	
	L	4 23 3	..	..	..	
	M	4 25 4	15	3	..	
	F	5 7 0	..	..	..	
	AE					
„ „	P	4 18 16	..	..	..	
	S	4 21 30	..	..	..	
	L	4 23 3	..	..	..	
	M	4 24 23	15	..	3	
	F	5 7 0	..	..	..	
	AN					
„ „	P	22 31 28	..	..	.	
	S	22 34 38	..	..	..	
	L	22 36 10	..	..	..	
	M	22 36 53	11	2	..	
	F	22 54 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE.	Remarks.
1931—*contd.*		H. M. S.				
	AE					
Jan. 26	P	22 31 28	..	..	..	
	S	22 34 38	..	..	..	
	L	22 36 10	..	..	..	
	M	22 38 20	13	..	2	
	F	22 54 0	..	..	..	
	AN					
„ 27	P	20 14 15	..	..	..	
	S	20 18 15	..	..	..	
	L	20 20 38	..	..	..	
	M	20 23 53	10	293	..	
„ 28	F	0 10 0	..	..	..	
	AE					
„ 27	P	20 14 15	..	..	..	
	S	20 18 15	..	..	..	
	L	20 20 38	..	..	..	
	M	20 24 38	9	..	239	
„ 28	F	0 10 0	..	..	...	
	AN					
„ „	e	20 42 0	..	..	..	Tremers.
	f	21 7 0	..	..	..	
	AE					
„ „	e	20 42 0	..	..	..	Do.
	f	21 7 0	..	..	..	
	AN					
„ „	P	21 35 19	..	..	..	
	S	21 44 10	..	..	..	
	L	22 0 22	..	..	..	
	M	22 0 42	25	40	..	
„ 29	F	0 55 0	..	..	..	
	AE					
„ 28	P	21 35 19	..	..	..	
	S	21 44 19	..	..	..	
	L	22 0 22	..	..	..	
	M	22 6 4	16	..	14	
„ 29	F	0 55 0	..	..		
	AN					
„ „	e	17 18 29	..	..		
	M	17 22 14	7	3		
	f	Mixed up with the next shock.				
	AE					
„ „	e	17 18 29	..	..		
	M	17 26 28	6	1		
	f	Mixed up with the next shock.				

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE.	Remarks.
1931—*contd.*		H. M. S.				
	AN					
Jan. 29	P	17 42 9	..	..	..	Feeble shock.
	F	18 3 0	..	..	..	
	AE					
„ „	P	17 42 9	..	..	..	Do.
	F	18 3 0	..	..	..	
	AN					
„ 30	P	3 37 41	..	..	..	
	S	3 41 56	..	..	..	
	L	3 44 46	..	..	..	
	M	3 47 59	7	3	..	
	F	4 6 0	..	..	..	
	AE					
„ „	P	3 37 41	..	..	..	
	S	3 41 56	..	..	..	
	L	3 44 46	..	..	..	
	M	3 47 21	7	..	1	
	F	4 6 0	..	..		
	AN					
„ 31	P	20 48 18	..	..	..	
	S	20 52 45	..	..	..	
	L	20 55 46	..	..	..	
	M	20 57 8	7	2	..	
	F	22 20 0	..	..	..	
	AE					
„ „	P	20 48 18	..	..	..	
	S	20 52 45	..	..	..	
	L	20 55 46	..	..	..	
	M	20 57 54	7		1	
	F	21 20 0	..	..	..	
	AN					
Feb. 1	e	5 15 31	..	..	..	Do.
„ „	f	5 34 0	..	..	..	
	AE					
„ „	e	5 15 31	..	..	..	Do.
	f	5 34 0	..	..	..	
	AN					
„ 2	P	2 3 43	..	..	..	Do.
	F	2 24 0	..	..	..	
	AE					
„ „	P	2 3 43	..	..	..	Do.
	F	2 24 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE.	Remarks.
1931—*contd.*		H. M. S.				
	AN					
Feb. 2	P	3 45 57	..	..	..	
	S	3 48 23	..	..	..	
	L	3 49 19	..	..	..	
	M	3 49 37	8	3	..	
	F	4 11 0	..	..	..	
	AE					
„ „	P	3 45 57	..	..	..	
	S	3 48 23	..	..	..	
	L	3 49 19	..	..	..	
	M	3 54 19	7	..	1	
	F	4 11 0	..	..	..	
	AN					
„ „	P	23 4 41	..	..	..	
	S	23 15 37	..	..	..	
	L	23 36 46	..	..	..	
	M	23 52 35	16	163	..	
„ 3	F	3 37 0	..	..	..	
	AE					
„ 2	P	23 4 41	..	..	..	
	S	23 15 37	..	..	..	
„ „	L	23 36 46	..	..	..	
	M	23 49 26	20	..	146	
„ 3	F	3 37 0	..	..	..	
	AN					
„ 4	e	6 41 0	..	..	..	Tremors.
	f	6 54 0	..	..	..	
	AE					
„ „	e	6 41 0	..	..	..	Do.
	f	6 54 0	..	..	..	
	AN					
„ 7	e	1 15 15	..	..	..	
	M	1 20 25	6	2	..	
	F	1 38 0	..	..	..	
„ „	AE	Movements very faint due to weak illumination				
	AN					
„ „	P	15 7 21	..	..	..	
	S	15 10 28	..	..	..	
	L	15 11 50	..	..	..	
	M	15 12 33	4	20	..	
	F	15 35 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE.	Remarks.
1931—*contd.*		H. M. S.				
	AE					
Feb. 7	P	15 7 21	..	..	..	
	S	15 10 28	..	..	..	
	L	15 11 50	..	..	..	
	M	15 12 47	4	..	6	
	F	15 35 0	..	..		
	AN					
„ 8	Pe	2 3 20	..	..	..	
	M	2 49 58	20	6	..	
	F	4 1 0	..	..	..	
	AE					
„ „	Pe	2 3 20	..	..	..	
	M	2 46 36	20	..	5	
	F	4 1 0	..	..		
	AN					
„ 10	P	1 28 6	..	..	..	
	S	1 32 16	..	.	..	
	L	1 34 54	..	..	..	
	M	1 35 59	10	33	..	
	F	2 24 0	..	..	..	
	AE					
„ „	P	1 28 6	..	..	..	
	S	1 32 16	..	..	..	
	L	1 34 54	..	..	..	
	M	1 38 51	14	..	12	
	F	2 24 0	..	..	..	
	AN					
„ 10	P	6 41 51	..	..	..	
	S	6 47 38	..	..	..	
	L	6 53 8	..	..	..	
	M	6 57 50	21	176	..	
	F	11 18 0	..	..	..	
	AE					
„ „	P	6 41 51	..	..	..	
	S	6 47 38	..	..	..	
	L	6 53 8	..	..	..	
	M	6 55 23	22	..	171	
	F	11 18 0	..	..	..	
	AN					
„ 11	Pe	17 31 44	..	..	..	
	M	18 8 36	19	5	..	
	F	18 37 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE.	Remarks.
1931—*contd.*		H. M. S.				
	AE					
Feb. 11	Pe	17 31 44	..	..	..	
	M	18 5 32	21	..	4	
	F	18 37 0	..	..	..	
	AN					
„ „	P	19 52 44	..	..	..	
	S	19 56 59	..	..	..	
	L	19 59 40	..	..	..	
	M	20 0 37	8	10	..	
	F	20 37 0	..	..	..	
	AE					
„ „	P	19 52 44	..	..	..	
	S	19 56 59	..	..	..	
	L	19 59 40	..	..	..	
	M	20 2 4	8	..	3	
	F	20 37 0	..	..	..	
	AN					
„ „	e	23 45 0	..	..	..	Tremors.
„ 12	f	0 2 0	..	..	..	
	AE					
„ 11	e	23 45 0	..	..	..	Do.
„ 12	f	0 2 0	..	..	..	
	AN					
„ „	P	5 51 25	..	..	..	
	S	5 57 11	..	..	..	
	L	6 3 4	..	..	..	
	M	6 7 16	16	12	..	
	F	8 8 0	..	..	..	
	AE					
„ „	P	5 51 25	..	..	..	
	S	5 57 11	..	..	..	
	L	6 3 4	..	..	..	
	M	6 8 12	16	..	16	
	F	8 8 0	..	..	..	
	AN					
„ 13	P	0 49 14	..	..	..	Feeble shock.
	S	0 59 24	..	..	..	
	Le	1 18 9	..	..	..	
	F	1 36 0	..	.	..	
	AE					
„ „	P	0 49 14	..	..	..	Do.
	S	0 59 24	..	..	..	
	Le	1 18 9	..	..	..	
	F	1 36 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE.	Remarks.
1931—*contd.*		H. M. S.				
Feb. 13	AN					
	P	1 45 20	..	..	..	
	S	1 56 7	..	..	..	
	L	2 17 44	..	..	..	
	M	2 33 44	18	102	..	
	F	5 10 0	..	..	..	
	AE					
,, ,,	P	1 45 20	..	..	..	
	S	1 56 7	..	..	..	
	L	2 17 41	..	..	..	
	M	2 36 14	18	..	84	
	F	5 10 0	..	..	..	
	AN					
,, ,,	P	11 38 44	..	..	..	Feeble shock.
	F	12 0 0	..	..	..	
	AE					
,, ,,	P	11 38 44	..	..	..	Do.
	F	12 0 0	..	..	..	
	AN					
,, ,,	P	22 22 34	..	..	..	
	S	22 26 34	..	..	..	
	L	22 29 14	..	..	..	
	M	22 39 21	12	3	..	
	F	23 6 0	..	..	..	
	AE					
,, ,,	P	22 22 34	..	..	..	
	S	22 26 34	..	..	..	
	L	22 29 14	..	..	..	
	M	22 41 16	13	..	3	
	F	23 6 0	..	..	..	
	AN					
,, ,,	e	23 29 0	..	..	..	Tremors.
	f	23 41 0	..	..	..	
	AE					
,, ,,	e	23 29 0	..	..	..	Do.
	f	23 41 0	..	..	..	
	AN					
,, 14	P	14 6 15	..	..	..	
	S	14 12 0	..	..	..	
	L	14 16 50	..	..	..	
	M	14 23 24	15	26	.	
	F	16 23 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE.	Remarks.
1931—*contd.*		H. M. S.				
	AE					
Feb. 14	P	14 6 15	..	..	..	
	S	14 12 0	..	..	..	
	L	14 16 50	..	..	..	
	M	14 19 21	18	..	47	
	F	16 23 0	..	..	..	
	AN					
,, 16	P	18 59 6	..	..	..	
	S	19 7 44	..	..	..	
	L	19 22 1	..	..	..	
	M	19 29 7	14	5	..	
	F	20 6 0	..	..	..	
	AE					
,, ,,	P	18 59 6	..	..	..	
	S	19 7 44	..	..	..	
	L	19 22 1	..	..	..	
	M	19 28 43	15	..	4	
	F	20 6 0	..	..	..	
	AN					
,, 18	P	19 30 42	..	..	..	Very feeble shock.
	F	20 4 0	..	..	..	
	AE					
,, ,,	P	19 30 42	..	..	..	Do.
	F	20 4 0	..	..	..	
	AN					
,, 19	P	17 47 50	..	..	..	
	S	17 53 42	..	..	..	
	L	18 0 15	..	..	..	
	M	18 3 56	19	42	..	
	F	20 48 0	..	..	..	
	AE					
,, ,,	P	17 47 50	..	..	..	
	S	17 53 42	..	..	..	
	L	18 0 15	..	..	..	
	M	18 5 2	18	..	28	
	F	20 48 0	..	..	..	
	AN					
,, 20	P	5 42 43	..	..	..	
	S	5 50 11	..	..	..	
	L	6 1 3	..	..	..	
	M	6 2 14	18	20	..	
	F	7 20 0	—	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE.	Remarks.
1931—*contd.*		H. M. S.				
	AE					
Feb. 20	P	5 42 43	..	..	..	
	S	5 50 11	..	..	..	
	L	6 1 3	..	..	..	
	M	6 8 31	7	..	5	
	F	7 20 0	..	..	..	
	AN					
,, 22	P	21 36 47	..	..	..	Feeble shock.
	S	21 44 18	..	..	..	
	L	21 54 51	..	..	..	
	F	22 24 0	..	..	..	
	AE					
,, ,,	P	21 36 47	..	..	..	Do.
	S	21 44 18	..	..	..	
	L	21 54 51	..	..	..	
	F	22 24 0	..	..	..	
	AN					
.. 24	Pe	17 35 43	..	..	..	
	M	17 57 23	25	6	..	
	F	18 32 0	..	..	..	
	AE					
,, ,,	Pe	17 35 43	..	..	..	
	M	17 58 58	23	..	3	
	F	18 32 0	..	..	..	
	AN					
,, 27	P	9 47 13	..	..	..	
	S	9 54 40	..	..	..	
	L	10 5 31	..	..	..	
	M	10 9 40	23	16	..	
	F	10 54 0	..	..	..	
	AE					
,, ,,	P	9 47 13	..	..	..	
	S	9 54 40	..	..	..	
	L	10 5 31	..	..	..	
	M	10 8 10	25	..	22	
	F	10 54 0	..	..	..	
	AN					Tremors.
,, 28	e	2 21 0	..	..	..	
	f	2 37 0	..	..	..	Do.
	AE					
,, ,,	e	2 21 0	..	..	..	
	f	2 37 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE.	Remarks.
1931—*contd.*		H. M. S.				
	AN					
Feb. 28	P	22 30 27	..	..	..	
	S	22 34 29	..	..	..	
	L	22 37 5	..	..	..	
	M	22 39 1	7	2	..	
	F	22 59 0	..	..	..	
	AE					
,, ,,	P	22 30 27	..	..	..	
	S	22 34 29	..	..	..	
	L	22 37 5	..	..	..	
	M	22 40 34	7	..	1	
	F	22 59 0	..	..	..	
	AN					
March 2	P	2 25 40	..	..	..	
	S	2 36 47	..	..	..	
	L	3 0 29	..	..	..	
	M	3 14 4	22	8	..	
	F	4 13 0	..	..	..	
	AE					
,, ,,	P	2 25 40	..	..	..	
	S	2 36 47	..	..	..	
	L	3 0 29	..	..	..	
	M	3 16 55	18	..	4	
	F	4 13 0	..	..	..	
	AN					
,, ,,	Pe	20 21 7	..	..	..	
	M	20 36 25	10	3	..	
	F	20 53 0	..	..	..	
	AE					
,, ,,	Pe	20 21 7	..	..	..	
	M	20 36 49	7	..	1	
	F	20 53 0	..	..	..	
	AN					
,, 5	P	18 0 52	..	..	..	
	S	18 5 38	..	..	..	
	L	18 9 16	..	..	..	
	M	18 17 54	15	6	..	
	F	20 33 0	..	..	..	
	AE					
,, ,,	P	18 0 52	..	..	..	
	S	18 5 38	..	..	..	
	L	18 9 16	..	..	..	
	M	18 21 30	12	..	4	
	F	20 33 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE	Remarks.
1931—*contd.* March 7	AN	H. M. S.				
	P	0 25 24	..	..	..	
	S	0 32 27	..	..	..	
	L	0 41 59	..	..	..	
	M	0 46 24	22	6	..	
	F	Mixed up with the next shock.	..			
	AE					
,, ,,	P	0 25 24	..	..	..	
	S	0 32 27	..	..	..	
	L	0 41 59	..	..	..	
	M	0 47 14	16	..	3	
	F	Mixed up with the next shock.	..			
	AN					
,, ,,	Pe	1 5 14	..	..	..	Feeble shock.
	f	3 5 0	..	..	..	
	AE					
,, ,,	Pe	1 5 14	..	..	..	Do.
	f	3 5 0	..	..	..	
	AN					
,, ,,	P	10 18 28	..	..	..	Do.
	F	11 51 0	..	..	..	
	AE					
,, ,,	P	1 8 28	..	..	..	Do.
	F	11 51 0	..	..	..	
	AN					
,, ,,	e	21 58 0	..	..	..	Tremors.
	f	22 8 0	..	..	..	
	AE					
,, ,,	e	21 58 0	..	..	..	Do.
	f	22 8 0	..	..	..	
	AN					
,, 8	P	1 59 5	..	..	..	
	S	2 6 5	..	..	..	
	L	2 15 42	..	..	..	
	M	2 19 57	16	12	..	
	F	3 40 0	..	..	..	
	AE					
,, ,,	P	1 59 5	..	..	..	
	S	2 6 5	..	..	..	
	L	2 15 42	..	..	..	
	M	2 20 46	20	..	18	
	F	3 40 0	..	..	..	
	AN					
,, ,,	Pe	12 44 11	..	..	..	
	M	12 56 56	16	4	..	
	F	13 15 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE.	Remarks.
1931—*contd.*		H. M. S.				
	AE					
March 8	Pe	12 44 11	..	..	..	
	M	12 59 25	20	..	4	
	F	13 15 0	..	..	..	
	AN					
,, 9	P	3 59 25	..	..	..	
	S	4 7 50	..	..	..	
	L	4 21 16	..	..	..	
	M	4 28 40	16	181	..	
	F	8 10 0	..	..	..	
	AE					
,, ,,	P	3 59 25	..	..	..	
	S	4 7 50	..	..	..	
	L	4 21 16	..	..	..	
	M	4 29 20	16	..	222	
	F	8 10 0	..	..	..	
	AN					
,, 11	P	6 8 44	..	..	..	
	S	6 17 25	..	..	..	
	L	6 32 21	..	..	..	
	F	7 4 0	..	..	..	
	AE					
,, ,,	P	6 8 44	..	..	..	
	S	6 17 25	..	..	..	
	L	6 32 21	..	..	..	
	F	7 4 0	..	..	..	
	AN					
,, ,,	P	12 37 29	..	..	..	
	S	12 46 11	..	..	..	
	L	13 0 44	..	..	..	
	M	13 7 7	22	14	..	
	F	14 49 0	..	..	..	
	AE					
,, ,,	P	12 37 29	..	..	..	
		12 46 11	..	..	..	
	L	13 0 44	..	..	..	
	M	13 15 46	15	..	8	
	F	14 49 0	..	..	..	
	AN					
,, 12	P	10 51 23	..	..	..	
	S	11 0 10	..	..	..	
	L	11 15 29	..	..	..	
	M	11 21 24	20	6	..	
	F	12 38 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE.	Remarks.
1931—*contd.*		H. M. S.				
March 12	AE					
	P	10 51 23	..	..		
	S	11 0 10	..	..		
	L	11 15 29	..	..		
	M	11 24 12	17	..	5	
	F	12 38 0	..	..		
	AN					
„ „	P	19 19 44	..	..		
	S	19 28 33	..	..		
	L	19 43 19	..	..		
	F	20 10 0	..	..		
	AE					
„ „	P	19 19 44	..	..	..	
	S	19 28 33	..	..	..	
	L	19 43 19	..	..	..	
	F	20 10 0	..	..	..	
	AN					
„ 14	e	18 44 0	..	..	..	Tremors.
	f	19 2 0	..	..	..	
	A					
„ „	e	18 44 0	..	..	..	Do.
	f	19 2 0	..	..	..	
	AN					
„ 15	P	15 19 9	..	..	..	
	S	15 23 2	..	..	..	
	L	15 25 9	..	..	..	
	M	15 30 27	13	4	..	
	F	15 53 0	..	..	..	
	AE					
„ „	P	15 19 9	..	..	..	
	S	15 23 2	..	..	..	
	L	15 25 9	..	..	..	
	M	15 35 7	8	..	2	
	F	15 53 0	..	..	..	
	AN					
„ „	P	16 52 27	..	..	..	Very feeble shock.
	F	17 29 0	..	..	..	
	AE					
„ „	P	16 52 27	..	..	..	Do.
	F	17 29 0	..	..	..	
	AN					
„ 17	P	15 58 26	..	..	..	Do.
	F	16 28 0	..	..	..	
	AE					
„ „	P	15 58 26	..	..		Do.
	F	16 28 0	..	..		

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE.	Remarks.
1931—*contd.*		H. M. S.				
	AN					
March 18	P	8 22 7	..	..	..	
	S	8 35 29	..	..	..	
	L	9 12 21	..	..	..	
	M	9 41 44	18	19	..	
	F	11 53 0	..	..	..	
	AE					
„ „	P	8 22 7	..	..	..	
	S	8 35 29	..	..	..	
	L	9 12 21	..	..	..	
	M	9 22 4	21	..	42	
	F	11 53 0	..	..	..	
	AN					
„ „	P	20 22 58	..	..	..	
	S	20 30 23		..	..	
	L	20 40 41	..	..	..	
	M	20 47 50	22	20	..	
	F	mixed up with the next shock.				
	AE					
„ „	P	20 22 58	..	..	..	
	S	20 30 23	..	..	..	
	L	20 40 41	..	..	..	
	M	20 45 26	15	..	13	
	F	mixed up with the next shock.				
	AN					
„ „	P	22 11 42	..	..	..	
	S	22 15 52	..	..	..	
	L	22 18 42	..	..	..	
	M	22 21 4	7	4	..	
	F	22 59 0	..	..	..	
	AE					
„ „	P	22 11 42	..	..	..	
	S	22 15 52	..	..	..	
	L	22 18 42	..	..	..	
	M	22 22 17	8	..	2	
	F	22 59 0	..	..	..	
	AN					
„ 19	P	6 33 23	..	..	..	
	S	6 39 51	..	..	..	
	L	6 47 21	..	..	..	
	M	6 53 46	15	14	..	
	F	8 19 0	..	..	..	

Date.	Phase.	Time. G. M. T.	Period (Sec.).	Amplitude (μ) AN	Amplitude (μ) AE	Remarks.
1931—*contd.*		H. M. S.				
	AE					
March 19	P	6 33 23	..	..	..	
	S	6 39 51	..	..	..	
	L	6 47 21	..	..	..	
	M	6 56 9	20	..	43	
	F	8 19 0	..	..	..	
	AN					
„ 21	e	22 45 0	..	..	..	Tremors.
	f	23 3 0	..	..	..	
	AE					
„ „	e	22 45 0	..	..	..	Do.
	f	23 3 0	..	..	..	
	AN					
„ 23	P	15 32 54	..	..	..	Feeble shock
	S	15 36 25	..	..	..	
	L	15 38 18	..	..	..	
	F	15 55 0	..	..	..	
	AE					
„ „	P	15 32 54	..	..	..	Do.
	S	15 36 25	..	..	..	
	L	15 38 18	..	..	..	
	F	15 55 0	..	..	..	
	AN					
„ 28	e	0 59 0	..	..	..	Tremors.
	f	1 22 0	..	..	..	
	AE					
„ „	e	0 59 0	..	..	..	Do.
	f	1 22 0	..	..	..	
	AN					
„ „	P	12 48 50	..	..	..	
	S	12 57 5	..	..	..	
	L	13 9 37	..	..	..	
	M	13 11 8	13	29	..	
	F	16 1 0	..	..	..	
	AE					
„ „	P	12 48 50	..	..	..	
	S	12 57 5	..	..	..	
	L	13 9 37	..	..	..	
	M	13 10 56	17	..	27	
	F	16 1 0	..	..	..	
	AN					
„ 29	e	17 49 0	..	..	..	Tremors.
	f	18 1 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN	Amplitude (μ) AE	Remarks.
1931—*contd.*		H. M. S.				
	AE					
March 29	e	17 49 0	..	..	..	Tremors.
	f	18 1 0	..	..	..	
	AN					
„ „	P	18 2 14	..	..	..	
	S	18 10 30	..	..	..	
	L	18 22 13	..	..	..	
	F	18 55 0	..	..	..	
	AE					
„ „	P	18 2 14	..	..	..	
	S	18 10 30	..	..	..	
	L	18 22 13	..	..	..	
	F	18 55 0	..	..	..	
	AN					
„ 30	e	7 51 0	..	..	..	
	f	8 8 0	..	..	..	Do.
	AE					
„ „	e	7 51 0	..	..	..	Do.
	f	8 8 0	..	..	..	
	AN					
„ „	P	13 48 12	..	..	..	
	S	13 52 54	..	..	..	
	L	13 56 10	..	..	..	
	M	14 6 10	15	2	..	
	F	14 28 0	..	..	..	
	AE					
„ „	P	13 48 12	..	..	..	
	S	13 52 54	..	..	..	
	L	13 56 10	..	..	..	
	M	14 6 19	15	..	2	
	F	14 28 0	..	..	..	
	AN					
„ 31	e	17 17 0	..	..	..	Do.
	f	17 51 0	..	..	..	
	AE					
„ „	e	17 17 0	..	..	..	Do.
	f	17 51 0	..	..	..	
	AN					
April 2	P	0 33 3	..	..	..	
	S	0 37 20		..	..	
	L	0 40 18	..	..	..	
	M	0 41 8	7	4	..	
	F	1 6 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ)		Remarks.
				AN	AE	
1931—*contd.*		H. M. S.				
	AE					
April 2	P	0 33 3	..	..	..	
	S	0 37 20	..	..	..	
	L	0 40 18	..	..	..	
	M	0 41 22	5	..	1	
	F	1 6 0	..	..	..	
	AN					
„ 3	P	Lost in shifting time.			..	Feeble shock.
	F	3 6 0	..	..		
	AE					
„ „	P	2 16 6	..	..	..	Do.
	F	3 6 0	..	..	..	
	AN					
„ „	e	3 22 0	..	..	..	Tremors.
	f	4 13 0	..	..	..	
	AE					
„ „	e	3 22 0	..	..	..	Do.
	f	4 13 0	..	..	..	
	AN					
„ „	P	12 50 40	..	..	..	Feeble shock.
	F	23 1 0	..	..	..	
	AE					
„ „	P	21 50 40	..	..	..	Do.
	F	23 1 0	..	..	..	
	AN					
„ „	P	23 36 10	..	..	..	Do.
	S	23 46 14	..	..	..	
„ 4	L	0 5 3	..	..	..	
	F	1 2 0	..	..	..	
	AE					
„ 3	P	23 36 10	..	..	..	Do.
	S	23 46 14	..	..	..	
„ 4	L	0 5 3	..	..	..	
	F	1 2 0	..	..	..	
	AN					
„ 6	P	7 2 19	..	..	..	
	S	7 12 39	..	..	..	
	L	7 32 39	..	..	..	
	M	7 38 10	24	11	..	
	F	9 2 0	..	..	..	
	AE					
„ „	P	7 2 19	..	..	..	
	S	7 12 39	..	..	..	
	L	7 32 39	..	..	..	
	M	7 35 30	24	..	12	
	F	9 29 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ)		Remarks.
				AN	AE	
1931—*contd.*		H. M. S.				
	AN					
April 7	P	0 20 45	..	..	..	
	S	0 25 8	..	..	..	
	L	0 28 8	..	..	..	
	M	0 28 19	5	4	..	
	F	0 53 0	..	..	..	
	AE					
„ „	P	0 20 45	..	..	..	
	S	0 25 8	..	..	..	
	L	0 28 8	..	..	..	
	M	0 29 6	7	..	1	
	F	0 53 0	..	..	..	
	AN					
„ „	P	7 52 11	..	..	..	Feeble shock.
	Se	8 2 37	..	..	..	
	L	8 21 23	..	..	..	
	F	9 2 0	..	..	..	
	AE					
„ „	P	7 52 11	..	..	..	Do.
	Se	8 2 37	..	..	..	
	L	8 21 23	..	..	..	
	F	9 2 0	..	..	..	
	AN					
„ 8	P	19 14 11	..	..	..	
	S	19 23 2	..	..	..	
	L	19 37 58	..	..	..	
	F	20 21 0	..	..	..	
	AE					
„ „	P	19 14 11	..	..	..	
	S	19 23 2	..	..	..	
	L	19 37 58	..	..	..	
	F	20 21 0	..	..	..	
	AN					
„ 9	P	23 11 57	..	..	..	
	S	23 20 48	..	..	..	
	L	23 35 54	..	..	..	
	M	23 41 8	15	4	..	
„ 10	F	0 15 0	..	..	..	
	AE					
„ 9	P	23 11 57	..	..	..	
	S	23 20 48	..	..	..	
	L	23 35 54	..	..	..	
	M	23 43 7	17	..	5	
„ 10	F	0 15 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN	Amplitude (μ) AE	Remarks.
1931—*contd.*		H. M. S.				
	AN					
April 11	P	Lost in shifting time.				Feeble shock.
	F	2 39 0	..	..	..	
	AE					
„ „	P	Lost in shifting time.				Do.
	F	2 39 0	..	..	..	
	AN					
„ 12	P	Lost in shifting time.				
	M	3 6 44	19	9	..	
	F	3 54 0	..	..	..	
	AE					
„ „	P	Lost in shifting time.				
	M	2 59 3	16	..	6	
	F	3 54 0	..	..	..	
	AN					
„ 15	P	17 6 56	..	..	..	Feeble shock.
	F	18 7 0	..	..	..	
	AE					
„ „	P	17 6 56	..	..	..	Do.
	F	18 7 0	..	..	..	
	AN					
„ 16	P	12 3 23	..	..	..	Do.
	F	13 5 0	..	..	..	
	AE					
„ „	P	12 3 23	..	..	..	Do.
	F	13 5 0	..	..	..	
	AN					
„ „	P	21 47 32	..	..	..	Distant feeble shock.
	S	21 58 14	..	..	..	
	L	22 19 19	..	..	..	
	F	23 9 0	..	..	..	
	AE					
„ „	P	21 45 16	..	..	..	Do.
	S	21 56 6	..	..	..	
	L	22 18 12	..	..	..	
	F	23 4 0	..	..	..	
	AN					
„ „	P	23 37 44	..	..	..	Feeble shock.
„ 17	F	0 4 0	..	..	..	
	AE					
„ 16	P	23 37 15	..	..	..	Do.
„ 17	F	0 4 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN	Amplitude (μ) AE	Remarks.
1931—*contd.*		H. M. S.				
	AN					
April 19	P	2 39 36	..	..	..	
	S	2 47 20	..	..	..	
	L	2 58 43	..	..	..	
	M	3 4 29	15	5	..	
	F	4 7 0	..	..	..	
	AE					
„ „	P	2 39 36	..	..	..	
	S	2 47 20	..	..	..	
	L	2 58 43	..	..	..	
	M	3 5 58	12	..	2	
	F	4 3 0	..	..	..	
	AN					
„ 22	Pe	0 10 40	..	..	..	
	M	0 45 34	21	4		
	F	15 7 0	..	..	..	
	AE					
„ „	Pe	0 10 40	..	..	..	
	M	0 43 25	16	..	3	
	F	1 57 0	..	..	..	
	AN					
„ 23	P	4 14 2	..	..	..	Very feeble shock.
	F	4 25 0	..	..	..	
	AE					
„ „	P	4 14 2	..	..	..	Do.
	F	4 25 0	..	..	..	
	AN					
„ 24	P	17 34 50	..	..	..	
	S	17 45 11	..	..	..	
	L	18 5 1	..	..	..	
	M	18 10 6	15	10	..	
	F	20 20 0	..	..	..	
	AE					
„ „	P	17 34 50	..	..	..	
	S	17 45 11	..	..	..	
	L	18 5 1	..	..		
	M	18 9 36	24	..	18	
	F	20 20 0	..	..	..	
	AN					
„ 26	P	1 57 27	..	..	..	Feeble shock.
	F	2 39 0	..	..	..	
	AE					
„ „	P	1 57 27	..	..	..	Do.
	F	2 39 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN	Amplitude (μ) AE	Remarks.
1931—*contd.*	AN	H. M. S.				
April 26	e	4 51 0	..	..	..	Tremors.
	f	5 47 0	..	..		
	AE					
„ „	e	4 51 0	..	..	..	Do.
	f	5 47 0	..	..	..	
	AN					
„ 27	P	16 57 1	..	..	..	
	S	17 2 11	..	..	..	
	L	17 6 34	..	..	..	
	M	17 12 36	16	30	..	
	F	19 6 0	..	..	..	
	AE					
„ „	P	16 57 1	..	..	..	
	S	17 2 11	..	..	..	
	L	17 6 34	..	..	..	
	M	17 12 21	15	..	19	
	F	19 6 0	..	..	..	
	AN					
May 3	P	20 21 1	..	..	..	Feeble shock.
	F	20 51 0	..	..	..	
	AE					
„ „	P	20 21 1	..	..	..	Do.
	F	20 51 0	..	..	..	
	AN					
„ 4	P	2 53 8	..	..	..	
	S	2 56 48	..	..	..	
	L	2 59 0	..	..	..	
	M	3 5 4	9	3	..	
	F	3 31 0	..	..	..	
„ „	AE	.. Record lost due to stoppage of clock.				
	AN					
„ 5	P	6 46 30	..	..	..	Do.
	S	6 50 9	..	..	..	
	L	6 52 11	..	..	..	
	F	7 17 0	..	..	..	
	AE					
„ „	P	6 46 39	..	..	..	Do.
	S	6 50 9	..	..	..	
	L	6 52 11	..	..	..	
	F	7 17 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE.	Remarks.
1931—*contd.*	AN	H. M. S.				
May 5	P	14 15 9	..	..	..	Feeble shock.
	S	14 18 39	..	..	..	
	L	14 20 50	..	..	..	
	F	14 43 0	..	..	..	
	AE					
„ „	P	14 15 9	..	..	..	Do.
	S	14 18 39	..	..	..	
	L	14 20 50	..	..	..	
	F	14 43 0	..	..	..	
	AN					
„ 6	Pe	15 23 3	..	..	..	
	M	16 3 50	17	3	..	
	F	17 0 0	..	..	..	
	AE					
„ „	Pe	15 23 3	..	..	..	
	M	15 59 36	17	..	2	
	F	17 0 0	..	..	..	
	AN					
„ 7	P	0 50 2	..	..	..	
	S	0 53 32	..	..	..	
	L	Lost in hourly break.				
	F	1 24 0	..	..	..	
	AE					
„ „	P	0 50 2	..	..	..	
	S	0 53 32	..	..	..	
	L	Lost in hourly break.				
	F	1 24 0	..	..	..	
	AN					
„ 10	P	19 48 41	..	..	..	Very feeble shock.
	F	20 22 0	..	..	..	
	AE					
„ „	P	19 48 41	..	..	..	Do.
	F	20 22 0	..	..	..	
	AN					
„ „	e	20 44 0	..	..	..	Tremors.
	f	21 19 0	..	..	..	
	AE					
„ „	e	20 44 0	..	..	..	Do.
	f	21 19 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN	Amplitude (μ) AE	Remarks.
1931—*contd.*		H. M. S.				
	AN					
May 12	P	1 48 30	..	..	..	
	S	1 58 48	..	..	..	
	L	Lost in shifting time.				
	M	2 23 9	17	5	..	
	F	3 7 0	..	..	..	
	AE					
„ „	P	1 48 30	..	..	..	
	S	1 57 48	..	..	..	
	L	Lost in shifting time.				
	M	2 23 55	16	4	..	
	F	3 7 0	..	..	..	
	AN					
„ „	P	10 29 39	..	..	..	Feeble shock.
	S	10 36 32	..	..	..	
	L	10 45 32	..	..	..	
	F	11 14 0	..	..	..	
	AE					
„ „	P	10 29 39	..	..	..	Do.
	S	10 36 32	..	..	..	
	L	10 45 32	..	..	..	
	F	11 14 0	..	..	..	
	AN					
„ 13	P	7 58 43	..	..	..	Do.
	S	8 3 0	..	..	..	
	L	8 5 52	..	..	..	
	F	8 57 0	..	..	..	
	AE					
„ „	P	7 58 43	..	..	..	Do.
	S	8 3 0	..	..	..	
	L	8 5 52	..	..	..	
	F	8 57 0	..	..	..	
	AN					
„ „	P	23 19 3	..	..	..	Do.
	F	23 54 0	..	..	..	
	AE					
„ „	P	23 19 3	..	..	..	Do.
	F	23 54 0	..	..	..	
	AN					
„ 15	e	8 3 0	..	..	..	Tremors.
	f	8 18 0	..	..	..	
	AE					
„ „	e	8 3 0	..	..	..	Do.
	f	8 18 0	..	..	..	
1931—*contd.*		H. M. S.				
	AN					
May 16	P	9 52 21	..	..	..	Feeble shock.
	S	9 56 23	..	..	..	
	L	9 58 44	..	..	..	
	F	10 31 0	..	..	..	
	AE					
„ „	P	9 52 21	..	..	..	Do.
	S	9 56 23	..	..	..	
	L	9 58 44	..	..	..	
	F	10 31 0	..	..	..	
	AN					
„ „	e	21 6 0	..	..	..	Tremors.
	f	21 47 0	..	..	..	
	AE					
„ „	e	21 6 0	..	..	..	Do.
	f	21 47 0	..	..	..	
	AN					
„ „	e	21 59 0	..	..	..	Do.
	f	23 4 0	..	..	..	
	AE					
„ „	e	21 59 0	..	..	..	Do.
	f	23 4 0	..	..	..	
	AN					
„ 17	P	0 58 28	..	..	..	
	S	1 2 35	..	..	..	
	L	1 5 7	..	..	..	
	M	1 6 18	7	2	..	
	F	1 29 0	..	..	..	
	AE					
„ „	P	0 58 28	..	..	..	
	S	1 2 35	..	..	..	
	L	1 5 7	..	..	..	
	M	1 10 18	6	..	1	
	F	1 29 0	..	..	..	
	AN					
„ „	e	9 34 0	..	..	..	Do.
	f	10 5 0	..	..	..	
	AE					
„ „	e	9 34 0	..	..	..	Do.
	f	10 5 0	..	..	..	
	AN					
„ „	e	12 59 0	..	..	..	Do.
	f	13 25 0	..	..	..	
	AE					
„ „	e	12 59 0	..	..	..	Do.
	f	13 25 0	..	..	..	

Date.	Phase.	Time. G. M. T.	Period (Sec.).	Amplitude (μ) AN	Amplitude (μ) AE	Remarks.
1931—*contd.*		H. M. S.				
	AN					
May 17	P	15 33 35	..	..	..	Very feeble shock.
	F	16 5 0	..	..	..	
	AE					
,, ,,	P	15 33 35	..	..	..	Do.
	F	16 5 0	..	..	..	
	AN					
,, 20	P	2 34 52	..	..	..	
	S	2 44 44	..	..	..	
	L	3 4 3	..	..	..	
	M	3 12 54	15	22	..	
	F	Mixed up with the next shock.			..	
	AE					
,, ,,	P	2 34 52	..	..	..	
	S	2 44 44	..	..	..	
	L	3 4 3	..	..	..	
	M	3 15 57	16	..	17	
	F	Mixed up with the next shock.			..	
	AN					
,, ,,	P	5 15 8	..	..	..	
	S	5 19 21	..	..	..	
	L	5 22 0	..	..	..	
	M	5 22 50	6	4	..	
	F	5 54 0	..	..	..	
	AE				..	
,, ,,	P	5 15 8	..	..	..	
					..	
	S	5 19 21	..	..		
	L	5 22 0	..	..		
	M	5 27 30	6	..	1	
	F	5 54 0	..	..	..	
	AN					
,, ,,	P	22 13 40	..	..	..	Distant Feeble shock.
	F	23 45 0	..	..	..	
	AE					
,, ,,	P	22 13 40	..	..	..	Do.
	F	23 45 0	..	..	..	
	AN					
,, 24	P	0 22 12	..	..	..	
	S	0 29 35	..	..	..	
	L	0 39 51	..	..	..	
	F	1 28 0	..	..	..	
1931—*contd.*		H. M. S.				
	AE					
May 24	P	0 22 12	..	..	..	
	S	0 29 35	..	..	..	
	L	0 39 51	..	..	..	
	F	1 28 0	..	..	..	
	AN					
,, ,,	Pe	8 9 41	..	..	..	Very feeble shock.
	f	8 27 0	..	..	..	
	AE					
,, ,,	Pe	8 9 41	..	..	..	Do.
	f	8 27 0	..	..	..	
	AN					
,, 27	P	0 53 4	..	..	..	
	S	0 56 35	..	..	..	
	L	0 58 35	..	..	..	
	F	1 19 0	..	..	..	
	AE					
,, ,,	P	0 53 4	..	..	..	
	S	0 56 35	..	..	..	
	L	0 58 35	..	..	..	
	F	1 19 0	..	..	..	
	AN					
,, ,,	e	6 39 0	..	..	..	Tremors.
	f	7 24 0	..	..	..	
	AE					
,, ,,	e	6 39 0	..	..	..	Do.
	f	7 24 0	..	..	..	
	AN					
,, 28	P	18 45 46	..	..	..	
	S	18 55 30	..	..	..	
	L	19 14 7	..	..	..	
	M	19 22 38	13	3	..	
	F	20 2 0	..	..	..	
	AE					
,, ,,	P	18 45 46	..	..	..	
	S	18 55 30	..	..	..	
	L	19 14 7	..	..	..	
	M	19 22 0	15	..	4	
	F	20 2 0	..	..	..	
	AN					
,, 29	P	5 44 24	..	..	..	Feeble shock.
	F	6 7 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
1931—*contd.*		H. M. S.				
	AE					
May 29	P	5 44 24	..	..	..	Feeble shock.
	F	6 7 0	..	..	..	
	AN					
„ 30	P	7 55 51	..	..	..	Do.
	S	7 56 57	..	..	..	
	L	7 57 16	..	..	..	
	F	8 9 0	..	..	..	
	AE					
„ „	P	7 55 51	..	..	..	Do.
	S	7 56 57	..	..	..	
	L	7 57 16	..	..	..	
	F	8 9 0	..	..	..	
	AN					
„ „	e	12 16 0	..	..	..	Tremors.
	f	12 44 0	..	..	..	
	AE				..	
„ „	e	12 16 0	..	..	..	Do.
	f	12 44 0	..	..		
	AN					
June 1	Pe	0 25 5	..	..	..	Very feeble shock.
	f	0 49 0	..	..	..	
	AE					
„ „	Pe	0 25 5	..	..	..	Do.
	f	0 49 0	..	..	..	
	AN					
„ „	P	12 0 18	..	..	..	Do.
	F	12 57 0	..	..	..	
	AE					
„ „	P	12 0 18	..	..	..	Do.
	F	12 57 0	..	..	..	
	AN					
„ 2	P	2 48 26	..	..	..	Feeble shock.
	S	2 55 12	..	..	..	
	L	3 3 21	..	..	..	
	F	3 26 0	..	..	..	
	AE					
„ „	P	2 48 26	..	..	..	Do.
	S	2 55 12	..	..	..	
	L	3 3 21	..	..	..	
	F	3 26 0	..	..	..	
	AN					
„ „	e	3 34 0	..	..	..	Tremors.
	f	3 58 0	..	..	..	

Date.	Phase.	Time G. M. T	Period (Sec.).	Amplitude (μ). NA	Amplitude (μ). AE	Remarks.
1931—*contd.*		H. M. S.				
	AE					
June 2	[e	3 34 0	..	..	..	Tremors,
	f	3 58 0	..	..	..	
	AN					
„ „	P	12 4 4	..	..	..	
	S	12 5 21	..	..	..	
	L	12 5 49	..	..	..	
	M	12 5 58	4	3	..	
	F	12 18 0	..	..	..	
	AE					
„ „	P	12 4 4	..	..	..	
	S	12 5 21	..	..	..	
	L	12 5 49	..	..	..	
	M	12 5 57	4	..	3	
	F	12 18 0	..	..	..	
	AN					
„ „	P	17 44 25	..	..	..	Feeble shock.
	S	17 46 25	..	..	..	
	L	17 47 13	..	..	..	
	F	18 10 0	..	..	..	
	AE					
„ „	P	17 44 25	..	..	..	Do.
	S	17 46 25	..	..	..	
	L	17 47 13	..	..	..	
	F	18 10 0	..	..	..	
	AN					
„ 4	P	10 0 26	..	..	..	
	S	10 8 45	..	..	..	
	L	10 21 11	..	..	..	
	F	11 0 0	..	..	..	
	AE					
„ „	P	10 0 26	..	..	..	
	S	10 8 45	..	..	..	
	L	10 21 11	..	..	..	
	F	11 0 0	..	..	..	
	AN					
„ 0	P	12 50 34	..	..	..	Do.
	S	12 55 44	..	..	..	
	L	13 0 14	..	..	..	
	F	13 11 0	..	..	..	
	AE					
„ „	P	12 50 34	..	..	..	Do.
	S	12 55 44	..	..	..	
	L	13 0 14	..	..	..	
	F	13 11 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN	Amplitude (μ) AE	Remarks.
1931—*contd.*		H. M. S.				
	AN					
June 9	e	17 3 0	..	..	..	Tremors.
	f	17 38 0	..	..	..	
	AE					
„ „	e	17 3 0	..	..	..	Do.
	f	17 38] 0	..	..	..	
	AN					
„ 15	e	12 37 0	..	..	..	Do.
	f	13 4 0	..	..	..	
	AE					
„ „	e	12 37 0	..	..	..	Do.
	f	13 4 0	..	..	..	
	AN					
„ „	P	12 22 13	..	..	..	Feeble shock.
	S	12 27 55	..	..	..	
	L	12 33 26	..	..	..	
	F	13 5 0	..	..	..	
	AE					
„ 17	P	12 22 13	..	..	..	Do.
	S	12 27 55	..	..	..	
	L	12 33 26	..	..	..	
	F	13 5 0	..	..	..	
	AN					
„ „	P	17 16 50	..	..	..	Do.
	S	17 23 21	..	..	..	
	L	17 30 55	..	..	..	
	F	17 59 0	..	..	..	
	AE					
„ „	P	17 16 50	..	..	..	Do.
	S	17 23 21	..	..	..	
	L	17 30 55	..	..	..	
	F	17 59 0	..	..	..	
	AN					
„ 18	P	13 2 7	..	..	..	
	S	13 4 50	..	..	..	
	L	13 5 59	..	..	..	
	M	13 9 8	6	30	..	
	F	13 47 0	..	..	..	
	AE					
„ „	P	13 2 7	..	..	..	
	S	13 4 50	..	..	..	
	L	13 5 59	..	..	..	
	M	13 9 16	7	..	25	
	F	13 47 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN.	Amplitude (μ) AE.	Remarks.
1931—*contd.*		H. M. S.				
	AN					
June 18	Pe	13 47 29	..	..	..	
	M	13 56 18	6	2	..	
	F	14 7 0	..	..	..	
	AE					
„ „	Pe	13 47 29	..	..	..	
	M	13 56 34	7	..	2	
	F	14 7 0	..	..	..	
	AN					
„ 22	e	16 21 0	..	..	..	Tremors.
	f	17 0 0	..	..	..	
	AE					
„ 22	e	16 21 0	..	..	..	Do.
	f	17 0 0	..	..	..	
	AN					
„ „	P	6 25 17	.	..	..	
	S	6 34 6	..	..	..	
	L	6 49 33	..	..	..	
	F	6 54 25	16	3	..	
	M	7 13 0	..	..	..	
	AE					
„ „	P	6 25 17	..	..	..	
	S	6 34 6	..	..	..	
	L	6 49 33	..	..	..	
	M	6 53 48	17	..	6	
	F	7 13 0	..	..	..	
	AN					
„ „	P	12 17 41	..	..	..	Feeble shock.
		12 48 0	..	..	..	
	F	12 17 41	..	..	..	Do.
	F	12 48 0	..	..	..	
„ 24	P	23 50 17	..	..	..	
	M	23 56 44	16	7	..	
„ 25	F	0 32 0	..	..	..	
	AE					
„ 24	P	23 50 17	..	..	..	
	M	23 56 51	15	..	5	
„ 25	F	0 37 0	..	..	..	
	AN					
„ „	e	0 49 0	..	..	..	Tremors.
	f	1 8 0	..	..	..	
	AE					
„ ..	e	0 50 0	..	..	..	Do.
	f	1 7 0	..	..	..	

Date.	Phase.	Time G.M.T.	Period (Sec.)	Amplitude (μ) AN	Amplitude (μ) AE	Remarks.
1931—*contd.*		H. M. S.				
	AN					
June 27	e	18 23 0	..	..	..	Tremors.
	f	18 53 0	..	..	..	
	AE					
	e	18 23 0	..	..	..	Do.
	f	18 53 0	..	..	..	
	N					
July 12	P	16 54 23	..	..	..	
	S	17 1 23	..	..	..	
	L	17 10 23	..	..	..	
	M	17 20 24	15	4	..	
	F	17 49 0	..	..	..	
	AE					
,, ,,	P	16 54 23	..	..	..	
	S	17 1 23	..	..	..	
	L	17 10 23	..	..	..	
	M	17 17 9	14	..	7	
	F	18 2 0	..	..	..	
	AN					
,, 15	Pe	16 44 44	..	..	..	
	M	17 8 10	12	..	7	
	F	17 53 0	..	..	..	
	AE					
,, ,,	Pe	16 44 44	..	..	..	
	M	17 9 37	12	..	5	
	F	17 49 0	..	..	..	
	AN					
,, 18	P	11 35 19	..	..	..	
	S	11 45 4	..	..	..	
	L	12 2 8	..	..	..	
	M	14 6 30	17	9	..	
	F	13 6 0	..	..	..	
	AE					
,, ,,	P	11 35 19	..	..	..	
	S	11 45 4	..	..	..	
	L	12 2 8	..	..	..	
	M	12 11 20	14	..	7	
	F	12 56 0	..	..	..	
	AN					
,, 21	P	4 0 38	..	..	..	
	S	4 8 48	..	..	..	
	L	4 21 4	..	..	..	
	F	4 59 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ) AN	Amplitude (μ) AE	Remarks.
1931—*contd.*		H. M. S.				
	AE					
July 21	P	4 0 38	..	..	..	
	S	4 8 48	..	..	..	
	L	4 21 4	..	..	..	
	F	4 59 0	..	..	..	
	AN					
,, 23	P	14 33 0	..	..	..	
	S	14 42 40	..	..	..	
	L	14 59 52	..	..	..	
	F	15 47 0	..	..	..	
,, ,,	AE	Record lost due to stoppage of driving clock.				
	AN					
,, 25	P	12 45 26	..	..	..	
	S	12 49 49	..	..	..	
	L	12 52 48	..	..	..	
	F	13 40 0	..	..	..	
	AE					
,, ,,	P	12 45 26	..	..	..	
	S	12 49 49	..	..	..	
	L	12 52 48	..	..	..	
	F	13 41 0	..	..	..	
	AN					
,, 28	e	3 55 0	..	..	..	Tremors.
	f	4 34 0	..	..	..	
	AE					
,, ,,	e	3 55 0	..	..	..	Do.
	f	4 34 0	..	..	..	
	AN					
,, ,,	Pe	23 27 43	..	..	..	
	M	23 34 39	14	4	..	
,, 29	F	0 24 0	..	..	..	
	AE					
	Pe	23 27 43	..	..	..	
	M	23 35 17	11	..	2	
,, ,,	F	0 29 0	..	..	..	
,, ,,	AN	Record lost owing to shift of zero.				
	AE					
,, ,,	Pe	11 43 44	..	..	..	
	M	11 54 33	..	1	..	
	F	12 32 0	..	..	..	
	AN					
,, ,,	P	17 19 38	..	..	..	
	S	17 23 5	..	..	..	
	L	17 25 16	..	..	..	
	F	17 52 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
1931—*contd.*		H. M. S.				
	AE					
July 21	P	17 19 38	..	..	..	
	S	17 23 5	..	..	..	
	L	17 25 16	..	..	..	
	F	17 57 0	..	..	..	
August 1	AN					
	e	19 57 0	..	..	..	Tremors.
	f	20 11 0	..	..	..	
	AE					
„ 1	e	19 57 0	..	..	..	Do.
	f	20 11 0	..	..	..	
	AN					
„ 2		15 43 0	..	..	..	Do.
	f	15 55 0	..	..	..	
	AE					
„ 2	e	15 43 0	..	..	..	Do.
	f	15 55 0	..	..	..	
	AN					
„ 2	P	18 7 50	..	..	..	
	S	18 9 39	..	..	..	
	L	18 10 14	..	..	..	
	M	18 12 59	8	2	..	
	F	Mixed up with the next shock.				
	AE					
„ 2	P	18 7 50	..	..	..	
	S	18 9 39	..	..	..	
	L	18 10 14	..	..	..	
	M	18 11 27	10	..	3	
	F	Mixed up with the next shock.				
	AN					
„ 2	P	18 19 53	..	..	..	
	S	18 21 42	..	..	..	
	L	18 22 21	..	..	..	
	M	18 25 29	6	4	..	
	F	19 1 0	..	..	..	
	AE					
„ 2	P	18 19 53	..	..	..	
	S	18 21 42	..	..	..	
	L	18 22 21	..	..	..	
	M	18 23 49	6	..	4	
	F	19 2 0	..	..	..	
	AN					
„ 2	Pe	22 12 42	..	..	..	Feeble shock.
	S	22 13 57	..	..	..	
	L	22 14 26	..	..	..	
	F	22 46 0	..	..	..	
	AN					
	e	19 57 0	..	..	..	Tremors.
	f	20 11 0	..	..	..	
	AE					
„ 1	e	19 57 0	..	..	..	Do.
	f	20 11 0	..	..	..	
	AN					
„ 2		15 43 0	..	..	..	Do.
	f	15 55 0	..	..	..	
	AE					
„ 2	e	15 43 0	..	..	..	Do.
	f	15 55 0	..	..	..	
	AN					
„ 2	P	18 7 50	..	..	..	
	S	18 9 39	..	..	..	
	L	18 10 14	..	..	..	
	M	18 12 59	8	2	..	
	F	Mixed up with the next shock.				
	AE					
„ 2	P	18 7 50	..	..	..	
	S	18 9 39	..	..	..	
	L	18 10 14	..	..	..	
	M	18 11 27	10	..	3	
	F	Mixed up with the next shock.				
	AN					
„ 2	P	18 19 53	..	..	..	
	S	18 21 42	..	..	..	
	L	18 22 21	..	..	..	
	M	18 25 29	6	4	..	
	F	19 1 0	..	..	..	
	AE					
„ 2	P	18 19 53	..	..	..	
	S	18 21 42	..	..	..	
	L	18 22 21	..	..	..	
	M	18 23 49	6	..	4	
	F	19 2 0	..	..	..	
	AN					
„ 2	Pe	22 12 42	..	..	..	Feeble shock.
	S	22 13 57	..	..	..	
	L	22 14 26	..	..	..	
	F	22 46 0	..	..	..	
August 2	Pe	22 12 42	..	..	..	Feeble shock.
	S	22 13 57	..	..	..	
	L	22 14 26	..	..	..	
	F	22 46 0	..	..	..	
	AN					
„ 4	Pe	5 44 34	..	..	..	Do.
	F	6 15 0	..	..	..	
	AE					
„ 4	Pe	5 44 34	..	..	..	Do.
	F	6 15 0	..	..	..	
	AN					
„ 6	e	18 38 0	..	..	..	Tremors.
	f	19 7 0	..	..	..	
	AE					
„ 6	e	18 38 0	..	..	..	Do.
	f	19 7 0	..	..	..	
	AN					
„ 7	P	2 23 30	..	..	..	
	S	2 32 14	..	..	..	
	L	2 46 44	..	..	..	
	M	2 52 5	26	47	..	
	F	5 21 0	..	..	..	
	AE					
„ 7	P	2 23 30	..	..	..	
	S	2 32 14	..	..	..	
	L	2 46 44	..	..	..	
	M	Record lost due to stoppage of clock.				
	F	5 12 0	..	..	..	
„ 8		Record lost owing to shift of zero.				
	AE					
„ 8	e	1 8 0	..	..	..	Do.
	f	1 28 0	..	..	..	
	AN					
„ 8	P	4 12 18	..	..	..	
	S	4 16 29	..	..	..	
	L	4 19 19	..	..	..	
	F	5 4 0	..	..	..	
	AE					
„ 8	P	4 12 18	..	..	..	
	S	4 16 29	..	..	..	
	L	4 19 19	..	..	..	
	F	5 4 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
1931—*contd.*		H. M. S.				
	AN					
August 8	P	8 59 3	..	..	..	Feeble shock.
	f	9 31 0	..	..	..	
	AE					
,, 8	P	8 59 3	..	..	..	Do.
	F	9 31 0	..	..	..	
	AN					
,, 10	Pe	10 28 2	..	..	..	
	M	10 38 28	10	4	..	
	F	11 0 0	..	..	..	
	AE					
,, 10	Pe	10 28 2	..	..	..	
	M	10 39 37	7	..	2	
	F	11 0 0	..	..	..	
	AN					
,, 10	P	21 25 5	..	..	..	
	S	21 30 19	..	..	..	
	L	21 34 45	..	..	..	
	M	21 49 32	8	285	..	
,, 11	F	1 36 0	..	..	..	
	AN					
,, 10	P	21 25 5	..	..	..	
	S	21 30 19	..	..	..	
	L	21 34 45	..	..	..	
	M	21 51 9	9	..	208	
,, 11	F	1 46 0	..	..	..	
	AN					
,, 11	P	7 15 45	..	..	..	Do.
	F	7 39 0	..	..	..	
	AE					
,, 11	P	7 15 45	..	..	..	Do.
	F	7 39 0	..	..	..	
	AN					
,, 11	P	17 47 44	..	..	..	Do.
	F	18 6 0	..	..	..	
	AE					
,, 11	P	17 47 44	..	..	..	Do.
	F	18 6 0	..	..	..	
	AN					
,, 12	P	1 16 0	..	..	..	Do.
	F	1 33 0	..	..	..	
	AE					
,, 12	P	1 16 0	..	..	..	Do.
	F	1 33 0	..	..	..	
	AN					
,, 13	e	23 3 0	..	..	..	Tremors.
	f	23 27 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
1931—*contd.*		H. M. S.				
	AE					
August 13	e	23 3 0	..	..	..	Tremors.
	f	23 27 0	..	..	..	
	AN					
,, 15	P	4 4 53	..	..	..	
	S	4 8 7	..	..	..	
	L	4 9 40	..	..	..	
	F	4 29 0	..	..	..	
	AE					
,, 15	P	4 4 53	..	..	..	
	S	4 8 7	..	..	..	
	L	4 9 40	..	..	..	
	F	4 29 0	..	..	..	
	AN					
,, 16	e	12 29 0	..	..	..	Do.
	f	13 22 0	..	..	..	
	AE					
,, 16	e	12 29 0	..	..	..	Do.
	f	13 22 0	..	..	..	
	AN					
,, 18	P	14 27 25	..	..	..	
	S	14 32 32	..	..	..	
	L	14 36 29	..	..	..	
	M	14 43 59	14	324	..	
	F	17 47 0	..	..	..	
	AE					
,, 18	P	14 27 25	..	..	..	
	S	14 32 32	..	..	..	
	L	14 36 29	..	..	..	
	M	14 42 9	15	..	224	
	F	17 40 0	..	..	..	
	AN					
,, 18	Pe	18 0 0	..	..	..	Very feeble shock.
	F	18 39 0	..	..	..	
	AE					
,, 18	Fe	18 0 0	..	..	..	Do.
	F	18 49 0	..	..	..	
	AN					
,, 24	P	21 38 12	..	..	..	
	S	21 41 22	..	..	..	
	L	21 42 47	..	..	..	
	M	21 46 17	1	410	..	
	F	Mixed up with the next shock.				

Date.	Phase	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
	AN	H. M. S.				
1931—*contd.*	AE					
August. 24	P	21 38 12	..	..	..	
	S	21 41 22	..	..	..	
	L	21 42 47	..	..	..	
	M	21 46 33	14	314	..	
	F	Mixed up with the next shock...				
	AN					
,, 24	P	23 32 47	..	..	..	
	S	23 35 22	..	..	..	
	L	23 36 31	..	..	..	
	M	23 39 24	12	14	..	
,, 25	F	0 29 0	..	..	..	
	AE					
,, 24	P	23 32 47	..	..	..	
	S	23 35 22	..	..	..	
	L	23 36 31	..	..	..	
	M	23 38 17	5	12	..	
,, 25	F	0 29 0	..	..	..	
	AN					
,, 25	P	0 33 47	..	..	..	
	M	0 41 42	7	6	..	
	F	Mixed up with the next shock...				
	AE					
,, 25	P	0 33 47	..	..	..	
	M	0 41 37	6	..	3	
	F	Mixed up with the next shock...				
	AN					
,, 25	P	0 57 17	..	..	..	Very feeble shock.
	F	1 26 0	..	..	..	
	AE					
,, 25	P	0 57 17	..	..	..	Do.
	F	1 26 0	..	..	..	
	AN					
,, 25	P	3 9 52	..	..	..	
	S	3 12 30	..	..	..	
	L	3 13 26	..	..	..	
	M	3 16 54	10	8	..	
	F	4 4 0	..	..	..	
	AE					
,, 25	P	3 9 52	..	..	..	
	S	3 12 30	..	..	..	
	L	3 13 26	..	..	..	
	M	3 17 2	12	..	7	
	F	4 4 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
		H. M. S.				
1931—*contd.*	AN					
August, 25	P	10 11 58	..	..	..	Very feeble shock.
	F	10 30 0	..	..	..	
	AE	.. ..				
,, 25	P	10 11 58	..	..	..	Do.
	F	10 30 0	..	..	..	
	AN	.. ..				
,, 25	P	15 50 48	..	..	..	Feeble shock.
	F	16 9 0	..	..	..	
	AE	..				
	P	15 50 48	..	..	..	Do.
	F	16 9 0	..	..	..	
	AN	..				
,, 25	P	16 42 48	..	..	..	Do.
	F	17 3 0	..	..	..	
	AE					
,, 25	P	16 42 48	..	..	..	Do.
	F	17 3 0	..	..	..	
	AN					
,, 25	P	18 58 48	..	..	..	Do.
	F	19 35 0	..	..	..	
	AE					
,, 25	P	18 58 48	..	..	..	Do.
	F	19 35 0	..	..	..	
	AN					
,, 25	e	21 43 0	..	..	..	Tremors.
	f	21 59 0	..	..	..	
	AE					
,, 25	e	21 43 0	..	..	..	Do.
	f	21 59 0	..	..	..	
	AN					
,, 26	P	0 32 49	..	..	..	Very feeble shock.
	F	0 51 0	..	..	..	
	AE	..				
,, 26	P	0 32 49	..	..	..	Do.
	F	0 51 0	..	..	..	
	AN					
,, 26	P	4 9 44	..	..	..	Do.
	F	4 27 0	..	..	..	
	AE					
,, 26	P	4 9 44	..	..	..	Do.
	F	4 27 0	..	..	..	
	AN					
,, 26	P	5 35 44	..	..	..	Do.
	F	5 56 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
1931—*contd.*		H. M. S.				
	AE					
Aug. 26	P	5 35 44	..	..	..	Very feeble shock.
	F	5 56 0	..	..	..	
	AN					
,, 26	e	6 24 0	..	..	..	Tremors.
	f	6 38 0	..	..	..	
	AE					
,, 26	e	6 24 0	..	..	..	Do.
	f	6 38 0	..	..	..	
	AN					
,, 26	P	8 1 59	..	..	..	Feeble shock.
	F	8 30 0	..	..	..	
	AE					
,, 26	P	8 1 59	..	..	..	Do.
	F	8 30 0	..	..	..	
	AN					
,, 26	P	11 1 49	..	..	..	Slight shock.
	F	11 28 0	..	..	..	
	AE					
,, 26	P	11 1 49	..	..	..	Do.
	F	11 28 0	..	..	..	
	AN					
,, 26	P	15 22 15	..	..	..	Very feeble shock.
	F	15 42 0	..	..	..	
	AE					
,, 26	P	15 22 15	..	..	..	Do.
	F	15 42 0	..	..	..	
	AN					
,, 26	P	19 34 57	..	..	..	
	M	19 39 36	14	8	..	
	F	20 35 0	..	..	..	
	AE					
,, 26	P	19 34 57	..	..	..	
	M	19 39 44	9	..	4	
	F	20 32 0	..	..	..	
	AN					
,, 26	P	22 26 15	..	..	..	Do.
	F	22 49 0	..	..	..	
	AE					
,, 26	P	22 26 15	..	..	..	Do.
	F	22 49 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
1931—*contd.*		H. M. S.				
	AN					
Aug. 27	e	4 31 0	..	..	..	Tremors.
	f	5 5 0	..	..	..	
	AE					
,, 27	e	4 31 0	..	..	..	Do.
	f	5 5 0	..	..	..	
	AN					
,, 27	P	7 21 44	..	..	..	Very feeble shock.
	F	7 44 0	..	..	..	
	AE					
,, 27	P	7 21 44	..	..	..	Do.
	F	7 44 0	..	..	..	
	AN					
,, 27	e	8 43 0	..	..	..	Tremors.
	f	9 12 0	..	..	..	
	AE					
,, 27	e	8 43 0	..	..	..	Do.
	f	9 12 0	..	..	..	
	AN					
,, 27	P	15 30 12	..	..	..	
	S	15 32 50	..	..	..	
	L	15 34 5	..	..	..	
	M	15 41 12	20	816	..	
	F	Mixed up with the next shock.				
	AE					
,, 27	P	15 30 12	..	..	..	
	S	15 32 50	..	..	..	
	L	15 34 5	..	..	..	
	M	15 42 30	14	..	305	
	F	Mixed up with the next shock.				
	AN					
,, 27	P	18 4 45	..	..	..	Feeble shock.
	F	Mixed up with the next shock.				
	AE					
,, 27	P	18 4 45	..	..	..	Do.
	F	Mixed up with the next shock.				
	AN					
,, 27	P	18 47 45	..	..	..	Do.
	F	19 35 0	..	..	..	
	AE					
,, 27	P	18 47 45	..	..	..	Do.
	F	19 35 0	..	..	..	

Date.	Phase	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
1931—*contd.*		H. M. S.				
	AN					
Aug. 27	P	20 7 45	..	..	..	Very feeble shock.
	F	20 42 0	..	..	..	
	AE					
,, 27	P	20 7 45	..	..	..	Do.
	F	20 42 0	..	..	..	
	AN					
,, 27	e	21 16 0	..	..	..	Tremors.
	f	21 35 0	..	..	..	
	AE					
,, 27	e	21 16 0	..	..	..	Do.
	f	21 35 0	..	..	..	
	AN					
,, 28	Pe	0 44 30	..	..	..	
	M	0 53 12	8	11	..	
	F	1 35 0	..	..	..	
	AE					
,, 28	Pe	0 44 30	..	..	..	
	M	0 51 33	9	..	13	
	F	1 31 0	..	..	..	
	AN					
,, 28	P	3 22 46	..	..	..	Very feeble shock.
	F	3 42 0	..	..	..	
	AE					
,, 28	P	3 22 46	..	..	..	Do.
	F	3 45 0	..	..	..	
	AN					
,, 28	P	7 51 46	..	..	..	Do.
	F	8 15 0	..	..	..	
	AE					
,, 28	P	7 51 46	..	..	..	Do.
	F	8 15 0	..	..	..	
	AN					
,, 28	P	10 15 12	..	..	..	Feeble shock.
	F	10 42 0	..	..	..	
	AE					
,, 28	P	10 15 12	..	..	..	Do.
	F	10 42 0	..	..	..	
	AN					
,, 28	e	15 21 0	..	..	..	Tremors.
	f	15 32 0	..	..	..	
	AE					
,, 28	e	15 21 0	..	..	..	Do.
	f	15 32 0	..	..	..	

Date.	Phase	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
1931—*contd.*		H. M. S.				
	AN					
Aug. 28	e	18 16 0	..	..	..	Tremors.
	f	18 39 0	..	..	..	
	AE					
,, 28	e	18 16 0	..	..	..	Do.
	f	18 39 0	..	..	..	
	AN					
,, 28	P	19 42 40	..	..	..	
	S	19 45 20	..	..	..	
	L	19 46 47	..	..	..	
	M	19 50 36	8	12	..	
	F	20 26 0	..	..	..	
	AE					
,, 28	P	19 42 40	..	..	..	
	S	19 45 20	..	..	..	
	L	19 46 47	..	..	..	
	M	19 47 10	7	..	12	
	F	20 28 0	..	..	..	
	AN					
,, 28	P	21 28 24	..	..	..	Feeble shock.
	F	21 56 0	..	..	..	
	AE					
,, 28	P	21 28 24	..	..	..	Do.
	F	21 56 0	..	..	..	
	AN					
,, 29	P	1 54 48	..	..	..	Do.
	F	Lost in shifting time.				
	AE					
,, 29	P	1 54 48	..	..	..	Do.
	F	Lost in shifting time.				
	AN					
,, 29	P	6 7 21	..	..	..	Very feeble shock.
	F	6 33 0	..	..	..	
	AE					
,, 29	P	6 7 21	..	..	..	Do.
	F	6 33 0	..	..	..	
	AN					
,, 29	P	13 30 14	..	..	..	Do.
	F	13 57 0	..	..	..	
	AE					
,, 29	P	13 30 14	..	..	..	Do.
	F	13 57 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
1931—*contd.*		H. M. S.				
	AN					
Aug. 29	P	19 58 45	..	..	..	Very feeble shock.
	F	20 23 0	..	..	..	
	AE					
„ 29	P	19 58 45	..	..	..	Do.
	F	20 23 0	..	..	..	
	AN					
„ 29	P	20 40 22	..	..	..	Do.
	F	21 3 0	..	..	..	
	AE					
„ 29	P	20 40 22	..	..	..	Do.
	F	21 3 0	..	..	..	
	AN					
„ 30	P	8 58 46	..	..	..	Do.
	F	9 14 0	..	..	..	
	AE					
„ 30	P	8 58 46	..	..	..	Do.
	F	9 14 0	..	..	..	
	AN					
„ 30	e	22 6 0	..	..	..	Tremors.
	f	22 18 0	..	..	..	
	AE					
„ 30	e	22 6 0	..	..	..	Do.
	f	22 18 0	..	..	..	
	AN					
„ 30	e	23 46 0	..	..	..	Do.
	f	23 59 0	..	..	..	
	AE					
„ 30	e	23 46 0	..	..	..	Do.
	f	23 59 0	..	..	..	
	AN					
„ 31	e	0 38 0	..	..	..	Do.
	f	0 52 0	..	..	..	
	AE					
„ 31	e	0 38 0	..	..	..	Do.
	f	0 52 0	..	..	..	
	AN					
„ 31	e	4 34 0	..	..	..	Do.
	f	4 55 0	..	..	..	
	AE					
„ 31	e	4 34 0	..	..	..	Do.
	f	4 55 0	..	..	..	
	AN					
Sept. 2	e	6 24 0	..	..	..	Do.
	f	6 47 0	..	..	..	
1931—*contd.*		H. M. S.				
	AE					
Sept. 2	e	6 24 0	..	..	..	Tremors.
	f	6 47 0	..	..	..	
	AN					
„ 2	e	7 44 0	..	..	..	Do.
	f	8 5 0	..	..	..	
	AE					
„ 2	e	7 44 0	..	..	..	Do.
	f	8 5 0	..	..	..	
	AN					
„ 3	P	14 54 47	..	..	..	Very feeble shock.
	F	15 13 0	..	..	..	
	AE					
„ 3	P	14 54 47	..	..	..	Do.
	F	15 13 0	..	..	..	
	AN					
„ 3	P	17 15 13	..	..	..	
	S	17 17 56	..	..	..	
	L	17 19 17	..	..	..	
	M	17 20 47	9	4	..	
	F	Mixed up with the next shock.				
	AE					
„ 3	P	17 15 13	..	..	..	
	S	17 17 56	..	..	..	
	L	17 19 17	..	..	..	
	M	17 21 1	10	..	3	
	F	Mixed up with the next shock.				
	AN					
„ 3	P	17 36 47	..	..	..	Do.
	F	17 49 0	..	..	..	
	AE					
„ 3	P	17 36 47	..	..	..	Do.
	F	17 49 0	..	..	..	
	AN					
„ 3	e	17 54 0	..	..	..	Tremors.
	f	18 13 0	..	..	..	
	AE					
„ 3	e	17 54 0	..	..	..	Do.
	f	18 13 0	..	..	..	
	AN					
„ 4	e	0 50 0	..	..	..	Do.
	f	1 25 0	..	..	..	
	AE					
„ 4	e	0 50 0	..	..	..	Do.
	f	1 25 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
1931—*contd.*		H. M. S.				
	AN					
Sept. 5	P	8 30 54	..	..	..	Feeble shock.
	F	8 51 0	..	..	..	
	AE					
,, 5	P	8 30 54	..	..	..	Do.
	F	8 51 0	..	..	..	
	AN					
,, 6	P	5 43 4	..	..	..	Do.
	F	6 18 0	..	..	..	
	AE					
,, 6	P	5 43 4	..	..	..	Do.
	F	6 18 0	..	..	..	
	AN					
,, 6	P	14 35 42	..	..	..	
	S	14 38 27	..	..	..	
	L	14 39 37	..	..	..	
	M	14 44 15	8	5	..	
	F	15 24 0	..	..	..	
	AE					
,, 6	P	14 35 42	..	..	..	
	S	14 38 27	..	..	..	
	L	14 39 37	..	..	..	
	M	14 40 1	6	..	5	
	F	15 22 0	..	..	..	
	AN					
,, 7	P	21 17 39	..	..	..	
	S	21 20 14	..	..	..	
	L	21 21 19	..	..	..	
	F	21 50 0	..	..	..	
	AE					
,, 7	P	21 17 39	..	..	..	
	S	21 20 14	..	..	..	
	L	21 21 19	..	..	..	
	F	21 50 0	..	..	..	
	AN					
,, 8	P	16 16 40	..	..	..	
	S	16 19 20	..	..	..	
	L	16 20 25	..	..	..	
	F	16 53 0	..	..	..	
	AE					
,, 8	P	16 16 40	..	..	..	
	S	16 19 20	..	..	..	
	L	16 20 25	..	..	..	
	F	16 57 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
1931—*contd.*		H. M. S.				
	AN					
Sept. 8	P	19 19 21	..	..	..	Distant feeble shock.
	F	20 42 0	..	..	..	
	AE					
,, 8	P	19 19 21	..	..	..	Do.
	F	20 42 0	..	..	..	
	AN					
,, 9	P	20 49 14	..	..	..	
	S	20 57 58	..	..	..	
	L	21 13 6	..	..	..	
	F	22 55 0	..	..	..	
	AE					
,, 9	P	20 49 14	..	..	..	
	S	20 57 58	..	..	..	
	L	21 13 6	..	..	..	
	F	22 55 0	..	..	..	
	AN					
,, 10	P	22 30 46	..	..	..	
	S	22 33 30	..	..	..	
	L	22 34 31	..	..	..	
	F	23 16 0	..	..	..	
	AE					
,, 10	P	22 30 46	..	..	..	
	S	22 33 30	..	..	..	
	L	22 34 31	..	..	..	
	F	23 16 0	..	..	..	
	AN					
,, 11	P	16 27 40	..	..	..	Very feeble shock.
	F	16 54 0	..	..	..	
	AE					
,, 11	P	16 27 40	..	..	..	Do.
	F	16 54 0	..	..	..	
	AN					
,, 11	e	23 20 0	..	..	..	Tremors.
	f	23 39 0	..	..	..	
	AE					
,, 11	e	23 20 0	..	..	..	Do.
	f	23 39 0	..	..	..	
	AN					
,, 12	P	2 5 25	..	..	..	Distant feeble shock.
	F	3 11 0	..	..	..	
	AE					
,, 12	P	2 5 25	..	..	..	Do.
	F	3 11 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
		H. M. S.				
1931—*contd.*	AN					
Sept. 12	P	12 34 25	..	..	..	
	S	12 37 9	..	..	..	
	L	12 38 5	..	..	..	
	F	13 7 0	..	..	..	
	AE					
,, 12	P	12 34 25	..	..	..	
	S	12 37 9	..	..	..	
	L	12 38 5	..	..	..	
	F	13 7 0	..	..	..	
	AN					
,, 12	P	18 35 30	..	..	..	
	S	18 38 10	..	..	..	
	L	18 39 13	..	..	..	
	F	19 16 0	..	..	..	
	AE					
,, 12	P	18 35 30	..	..	..	
	S	18 38 10	..	..	..	
	L	18 39 13	..	..	..	
	F	19 16 0	..	..	..	
	AN					
,, 13	e	3 39 0	..	..	..	Tremors.
	f	3 54 0	..	..	..	
	AE					
,, 13	e	3 39 0	..	..	..	Do.
	f	3 54 0	..	..	..	
	AN					
,, 13	e	4 30 0	..	..	..	Do.
	f	4 53 0	..	..	..	
	AE					
,, 13	e	4 30 0	..	..	..	Do.
	f	4 53 0	..	..	..	
	AN					
,, 13	P	5 30 46	..	..	..	Feeble shock.
	F	6 21 0	..	..	..	
	AE					
,, 13	P	5 30 46	..	..	..	Do.
	F	6 21 0	..	..	..	
	AN					
,, 14	P	3 36 10	..	..	..	
	S	3 39 22	..	..	..	
	L	3 41 1	..	..	..	
	F	4 27 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.)	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
		H. M. S.				
1931—*cont'd.*	AE					
Sept. 14	P	3 36 10	..	..	..	
	S	3 39 22	..	..	..	
	L	3 41 1	..	..	..	
	F	4 27 0	..	..	..	
	AN					
,, 16	P	10 44 37	..	..	..	Very feeble shock.
	F	11 3 0	..	..	..	
	AE					
,, 16	P	10 44 37	..	..	..	Do.
	F	11 3 0	..	..	..	
	AN					
,, 16	P	12 53 14	..	..	..	
	S	13 1 26	..	..	..	
	Le	13 14 58	..	..	..	
	F	13 43 0	..	..	..	
	AE					
,, 16	P	12 53 14	..	..	..	
	S	13 1 26	..	..	..	
	Le	13 14 58	..	..	..	
	F	13 43 0	..	..	..	
	AN					
,, 18	P	18 2 24	..	..	..	Very feeble local shock.
	S	18 2 37	..	..	..	
	L	18 2 47	..	..	..	
	F	18 9 0	..	..	..	
	AE					
,, 18	P	18 2 24	..	..	..	Do.
	S	18 2 37	..	..	..	
	L	18 2 47	..	..	..	
	F	18 9 0	..	..	..	
	AN					
,, 18	P	19 0 57	..	..	..	
	S	19 3 34	..	..	..	
	L	19 4 42	..	..	..	
	F	19 34 0	..	..	..	
,, 18	P	19 0 57	..	..	..	
	S	19 3 34	..	..	..	
	L	19 4 42	..	..	..	
	F	19 34 0	..	..	..	
	AN					
,, 18	P	21 56 47	..	..	..	Very feeble shock.
	F	22 16 0	..	..	..	

Date:	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	AE	Remarks.
		H. M. S.				
1931—*contd.*	AE					
Sept. 18	P	21 59 47	..	..	..	Feeble shock.
	F	22 16 0	..	..	..	
	AN	..				
„ 19	P	7 59 30	..	..	..	Do.
	F	8 45 0	..	..	..	
	AE					
„ 19	P	7 59 30	..	..	..	Do.
	F	8 45 0	..	..	..	
	AN					
„ 20	P	15 32 48	..	..	..	Do.
	F	15 52 0	..	..	..	
	AE					
„ 20	P	15 32 48	..	..	..	
	F	15 52 0	..	..	..	
	AN					
„ 20	P	23 47 56	..	..	..	Do.
„ 21	F	0 24 0	..	..	..	
	AE					
„ 20	P	23 47 56	..	..	..	Do.
„ 21	F	0 24 0	..	..	..	
	AN					
„ 21	P	2 30 16	..	..	..	
	S	2 38 24	..	..	..	
	L	2 51 2	..	..	..	
	M	2 55 34	14	13	..	
	F	4 49 0	..	..	..	
	AE					
„ 21	P	2 30 16	..	..	..	
	S	2 38 24	..	..	..	
	L	2 51 2	..	..	..	
	M	2 59 0	14	..	7	
	F	4 46 0	..	..	..	
	AN					
„ 21	P	10 34 39	..	..	..	
	S	10 40 35	..	..	..	
	L	10 46 5	..	..	..	
	M	10 52 52	15	132	..	
	F	12 42 0	..	..	..	
	AE					
„ 21	P	10 34 39	..	..	..	
	S	10 40 35	..	..	..	
	L	10 46 5	..	..	..	
	M	10 54 58	13	..	14	
	F	12 29 0	..	..	..	
1931—*contd.*	AN					
	e	13 52 0	..	..	..	Tremors.
	f	15 0 0	..	..	..	
	AE					
Sept. 21	e	13 52 0	..	..	..	Do.
	f	15 0 0	..	..	..	
	AN					
„ 23	P	2 10 44	..	..	..	Feeble shock.
	F	2 36 0	..	..	..	
	AE					
„ 23	P	2 10 44	..	..	..	Do.
	F	2 37 0	..	..	..	
	AN					
„ 25	P	4 33 47	..	..	..	Do.
	F	4 57 0	..	..	..	
	AE					
„ 25	P	4 33 47	..	..	..	Do.
	F	4 57 0	..	..	..	
	AN					
„ 25	P	6 7 9	..	..	..	
	S	6 13 2	..	..	..	
	L	6 18 55	..	..	..	
	M	6 22 17	21	728	..	
	F	11 42 0	..	..	..	
	AE					
„ 25	P	6 7 9	..	..	..	
	S	6 13 2	..	..	..	
	L	6 18 55	..	..	..	
	M	6 21 47	20	296	..	
	F	10 29 0	..	..	..	
	AN					
„ 25	P	16 57 47	..	..	..	Very feeble shock.
	F	17 55 0	..	..	..	
	AE					
„ 25	P	16 57 47	..	..	..	Do.
	F	17 55 0	..	..	..	
	AN					
„ 25	P	21 40 36	..	..	..	
	S	21 44 47	..	..	..	
	L	21 47 24	..	..	..	
	F	22 28 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
		H. M. S.				
1931—*contd.*	AE					
Sept. 25	P	21 40 36	..	..	..	
	S	21 44 47	..	..	..	
	L	21 47 24	..	..	..	
	F	22 28 0	..	..	..	
	AN					
„ 26	P	20 22 45	..	..	..	Distant shock.
	F	22 26 0	..	..	..	
	AE					
„ 26	P	20 22 45	..	..	..	Do.
	F	22 25 0	..	..	..	
	AN					
„ 28	P	17 25 49	..	..	..	Feeble shock.
	F	18 31 0	..	..	..	
	AE					
„ 28	P	17 25 49	..	..	..	Do.
	F	18 31 0	..	..	..	
	AN					
„ 29	P	5 24 8	..	..	..	
	S	5 31 38	..	..	..	
	L	5 42 14	..	..	..	
	F	6 29 0	..	..	..	
	AE					
„ 29	P	5 24 8	..	..	..	
	S	5 31 38	..	..	..	
	L	5 42 14	..	..	..	
	F	6 29 0	..	..	..	
	AN					
„ 29	e	9 56 0	..	..	..	Tremors.
	f	10 27 0	..	..	..	
	AE					
„ 29	e	9 56 0	..	..	..	Do.
	f	10 27 0	..	..	..	
	AN					
„ 30	P	11 17 45	..	..	..	
	S	11 20 24	..	..	..	
	L	11 21 30	..	..	..	
	M	11 24 36	8	6	..	
	F	12 39 0	..	..	..	
	AE					
„ 30	P	11 17 45	..	..	..	
	S	11 20 24	..	..	..	
	L	11 21 30	..	..	..	
	M	11 24 15	8	..	8	
	F	12 41 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
		H. M. S.				
1931—*contd.*	AN					
Sept. 30	P	12 59 18	..	..	..	
	S	13 1 57	..	..	..	
	L	13 3 0	..	..	..	
	F	13 36 0	..	..	..	
	AE					
„ 30	P	12 59 18	..	..	..	
	S	13 1 57	..	..	..	
	L	13 3 0	..	..	..	
	F	13 36 0	..	..	..	
	AN					
Oct. 1	Pe	12 8 32	..	..	..	Distant feeble shock.
	F	13 51 0	..	..	..	
	AE					
„ 1	Pe	12 8 32	..	..	..	Do.
	F	13 51 0	..	..	..	
	AN					
„ 2	P	14 23 49	..	..	..	
	S	14 28 19	..	..	..	
	L	14 31 29	..	..	..	
	F	15 7 0	..	..	..	
	AE					
„ 2	P	14 23 49	..	..	..	
	S	14 28 19	..	..	..	
	L	14 31 29	..	..	..	
	F	15 7 0	..	..	..	
	AN					
„ 3	Pe	10 35 4	..	..	..	
	S	10 41 48	..	..	..	
	L	10 47 7	..	..	..	
	F	10 35 0	..	..	..	
	AE					
„ 3	Pe	10 35 4	..	..	..	
	S	10 41 28	..	..	..	
	L	10 47 7	..	..	..	
	F	11 34 0	..	..	..	
	AN					
„ 3	Pe	17 31 0	..	..	..	Very feeble shock.
	F	17 45 0	..	..	..	
	AE					
„ 3	Pe	17 31 0	..	..	..	Do.
	F	17 45 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude(μ). AN	Amplitude(μ). AE	Remarks.
		H. M. S.				
1931—*contd.*	AN					
Oct. 3	P	19 26 41	..	..	..	
	S	19 37 43	..	..	..	
	L	20 0 21	..	..	..	
	M	20 26 30	15	63	..	
„ 4	F	3 33 0	..	..	..	
	AE					
„ 3	P	19 26 41	..	..	..	
	S	19 37 43	..	..	..	
	L	20 0 21	..	..	..	
	M	20 13 21	19	..	104	
„ 4	F	3 34 0	..	..	..	
	AN					
„ 4	P	11 28 15	..	..	..	
	S	11 31 55	..	..	..	
	L	11 34 10	..	..	..	
	M	11 37 8	9	4	..	
	F	12 9 0	..	..	..	
	AE					
„ 4	P	11 28 15	..	..	..	
	S	11 31 55	..	..	..	
	L	11 34 10	..	..	..	
	M	11 37 8	9	..	3	
	F	12 14 0	..	..	..	
	AN					
„ 4	e	16 5 0	..	..	..	Tremors.
	f	16 42 0	..	..	..	
	AE					
„ 4	e	16 5 0	..	..	..	Do.
	f	16 42 0	..	..	..	
	AN					
„ 4	P	22 43 24	..	..	..	Very feeble shock.
	F	23 31 0	..	..	..	
	AE					
„ 4	P	22 43 24	..	..	..	Do.
	F	23 31 0	..	..	..	
	AN					
„ 5	P	4 56 10	..	..	..	Do.
	F	5 52 0	..	..	..	
	AE					
„ 5	P	4 56 10	..	..	..	Do.
	F	5 52 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude(μ). AN	Amplitude(μ). AE	Remarks.
		H. M. S.				
1931—*contd.*	AN					
Oct. 5	P	22 35 24	..	..	..	
	S	22 38 37	..	..	..	
	L	22 39 53	..	..	..	
	M	22 43 28	8	12	..	
„ 6	F	0 28 0	..	..	..	
	AE					
„ 5	P	22 35 24	..	..	..	
	S	22 38 37	..	..	..	
	L	22 39 53	..	..	..	
	M	22 42 10	9	..	19	
„ 6	F	0 31 0	..	..	..	
	AN					
„ 6	P	17 59 57	..	..	..	Very feeble shock.
	F	19 38 0	..	..	..	
	AE					
„ 6	P	17 59 57	..	..	..	Do.
	F	19 38 0	..	..	..	
	AN					
„ 6	Pe	21 18 50	..	..	..	Do.
	F	21 48 0	..	..	..	
	AE					
„ 6	Pe	21 18 50	..	..	..	Do.
	F	21 53 0	..	..	..	
	AN					
„ 9	P	6 11 18	..	..	..	
	S	6 15 10	..	..	..	
	L	6 17 25	..	..	..	
	M	6 25 17	16	4	..	
	F	7 29 0	..	..	..	
	AE					
„ 9	P	6 11 18	..	..	..	
	S	6 15 10	..	..	..	
	L	6 17 25	..	..	..	
	M	6 19 35	16	..	5	
	F	7 27 0	..	..	..	
	AN					
„ 9	Pe	15 43 0	..	..	..	Do.
	F	15 55 0	..	..	..	
	AE					
„ 9	Pe	15 43 0	..	..	..	Do.
	F	15 55 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
		H. M. S.				
1931—*contd.*	AN					
Oct. 10	P	0 34 4	..	..	..	
	S	0 44 37	..	..	..	
	L	1 6 1	..	..	..	
	M	1 9 45	25	123	..	
	F	7 8 0	..	..	..	
	AE					
„ 10	P	0 34 4	..	..	..	
	S	0 44 37	..	..	..	
	L	1 6 1	..	..	..	
	M	1 22 48	19	..	60	
	F	7 8 0	..	..	..	
	AN					
„ 10	e	7 32 0	..	..	..	Tremors.
	f	8 50 0	..	..	..	
	AE					
„ 10	e	7 32 0	..	..	..	Do.
	F	8 50 0	..	..	..	
	AN					
„ 10	P	16 57 43	..	..	..	
	M	17 18 31	11	8	..	
	F	18 20 0	..	..	..	
	AE					
„ 10	P	16 57 43	..	..	..	
	M	17 20 38	13	..	8	
	F	18 23 0	..	..	..	
	AN					
„ 11	P	0 41 33	..	..	..	Very feeble shock.
	F	1 4 0	..	..	..	
	AE					
„ 11	P	0 41 33	..	..	..	Do.
	F	1 2 0	..	..	..	
	AN					
„ 12	e	1 1 0	..	..	..	Tremors.
	f	1 27 0	..	..	..	
	AE					
„ 12	e	1 1 0	..	..	..	Do.
	f	1 29 0	..	..	..	
	AN					
„ 12	e	3 47 0	..	..	..	Do.
	f	4 32 0	..	..	..	
	AE					
„ 12	e	3 47 0	..	..	..	Do.
	f	4 29 0	..	..	..	
1931—*contd.*	AN					
Oct. 12	P	13 50 2	..	..	..	Very feeble shock.
	F	14 44 0	..	..	..	
	AE					
„ 12	P	13 50 2	..	..	..	Do.
	F	14 43 0	..	..	..	
	AN					
„ 13	e	5 16 0	..	..	..	Tremors.
	f	6 17 0	..	..	..	
	AE					
„ 13	e	5 16 0	..	..	..	Do.
	f	6 17 0	..	..	..	
	AN					
„ 13	e	11 20 0	..	..	..	Do.
	f	12 36 0	..	..	..	
	AE					
„ 13	e	11 20 0	..	..	..	Do.
	f	12 36 0	..	..	..	
	AN					
„ 14	e	21 13 0	..	..	..	Do.
	f	22 22 0	..	..	..	
	AE					
„ 14	e	21 13 0	..	..	..	Do.
	f	22 22 0	..	..	..	
	AN					
„ 16	e	13 7 0	..	..	..	Do.
	f	14 2 0	..	..	..	
	AE					
„ 16	e	13 7 0	..	..	..	Do.
	f	14 2 0	..	..	..	
	AN					
„ 18	Pe	0 31 22	..	..	..	Distant feeble shock.
	F	2 58 0	..	..	..	
	AE					
„ 18	Pe	0 31 22	..	..	..	Do.
	F	2 58 0	..	..	..	
	AN					
„ 18	P	4 38 31	..	..	..	Feeble shock.
	F	6 34 0	..	..	..	
	AE					
„ 18	P	4 38 31	..	..	..	Do.
	F	6 40 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
		H. M. S.				
1931—*contd.*	AN					
Oct. 18	P	7 12 9	..	..	..	
	S	7 16 36	..	..	..	
	L	7 19 52	..	..	..	
	M	7 20 12	7	6	..	
	F	8 5 0	..	..	..	
	AE					
„ 18	P	7 12 9	..	..	..	
	S	7 16 36	..	..	..	
	L	7 19 52	..	..	..	
	M	7 23 23	9	3	..	
	F	8 6 0	..	..	..	
	AN					
„ 20	P	16 4 49	..	..	..	Very feeble shock.
	F	16 37 0	..	..	..	
	AE					
„ 20	P	16 4 49	..	..	..	Do.
	F	16 37 0	..	..	..	
	AN					
„ 23	P	0 53 16	..	..	..	Feeble local shock.
	F	1 2 0	..	..	..	
	AE					
„ 23	P	0 53 16	..	..	..	Do.
	F	1 2 0	..	..	..	
	AN					
„ 23	P	3 0 27	..	..	..	Do.
	S	3 0 38	..	..	..	
	L	3 0 47	..	..	..	
	F	3 6 0	..	..	..	
	AE					
„ 23	P	3 0 27	..	..	..	Do.
	S	3 0 38	..	..	..	
	L	3 0 47	..	..	..	
	F	3 6 0	..	..	..	
	AN					
„ 23	P	12 1 44	..	..	..	Feeble shock.
	F	13 21 0	..	..	..	
	AE					
„ 23	P	12 1 44	..	..	..	Do.
	F	13 21 0	..	..	..	
	AN					
„ 23	P	20 18 11	..	..	..	Do.
	F	22 6 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
		H. M. S.				
1931—*contd.*	AE					
Oct. 23	P	20 18 11	..	..	..	Feeble shock.
	F	22 6 0	..	..	..	
	AN					
„ 24	e	2 59 0	..	..	..	Tremors.
	f	3 22 0	..	..	..	
	AE					
„ 24	e	2 59 0	..	..	..	Do.
	f	3 22 0	..	..	..	
	AN					
„ 24	e	4 48 0	..	..	..	Do.
	f	5 10 0	..	..	..	
	AE					
„ 24	e	4 48 0	..	..	..	Do.
	f	5 10 0	..	..	..	
	AN					
„ 24	P	11 48 17	..	..	..	Distant feeble shock.
	F	13 29 0	..	..	..	
	AE					
„ 24	P	11 48 17	..	..	.	Do.
	F	13 33 0	..	..	..	
	AN					
„ 26	e	5 24 0	..	..	..	Tremors.
	f	6 21 0	..	..	..	
	AE					
„ 26	e	5 24 0	..	..	..	Do.
	f	6 21 0	..	..	..	
	AN					
„ 26	P	12 6 47	..	..	..	Feeble shock.
	F	13 27 0	..	..	..	
	AE					
„ 26	P	12 6 47	..	..	..	Do.
	F	13 27 0	..	..	..	
	AN					
„ 26	P	14 51 17	..	..	..	Do.
	F	15 53 0	..	..	..	
	AE					
„ 26	P	14 51 17	..	..	..	Do.
	F	15 53 0	..	..	..	
	AN					
„ 26	P	18 32 57	..	..	..	Feeble local shock.
	F	18 36 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
		H. M. S.				
1931—*contd.*	AE					
Oct. 26	P	18 32 57	..	..	..	Feeble local shock.
	F	18 36 0	..	..	..	
	AN					
„ 26	P	19 59 34	..	..	..	Feeble shock.
	F	20 32 0	..	..	..	
	AE					
„ 26	P	19 59 34	..	..	..	Do.
	F	20 32 0	..	..	..	
	AN					
„ 27	e	1 47 0	..	..	..	Tremors.
	f	2 20 0	..	..	..	
	AE					
„ 27	e	1 47 0	..	..	..	Do.
	f	2 20 0	..	..	..	
	AN					
„ 27	P	19 0 13	..	..	..	
	S	19 2 0	..	..	..	
	L	19 2 48	..	..	..	
	M	19 4 23	6	3	..	
	F	19 54 0	..	..	..	
	AE					
„ 27	P	19 0 13	..	..	..	
	S	19 2 0	..	..	..	
	L	19 2 48	..	..	..	
	M	19 4 0	6	..	3	
	F	20 8 0	..	..	..	
	AN					
„ 27	P	21 5 24	..	..	..	
	S	21 7 10	..	..	..	
	L	21 7 49	..	..	..	
	F	21 34 0	..	..	..	
	AE					
„ 27	P	21 5 24	..	..	..	
	S	21 7 10	..	..	..	
	L	21 7 49	..	..	..	
	F	21 34 0	..	..	..	
	AN					
„ 28	P	5 43 42	..	..	..	
	M	6 5 9	13	4	..	
	F	7 15 0	..	..	..	
	AE					
„ 28	Record lost owing to faint illumination.					
	AN					
„ 29	P	7 34 25	..	..	..	Very feeble shock.
	F	8 4 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
		H. M. S.				
1931—*contd.*	AE					
Oct. 29	P	7 34 25	..	..	..	Very feeble shock.
	F	8 4 0	..	..	..	
	AN					
„ 29	e	8 57 0	..	..	..	Tremors.
	f	9 28 0	..	..	..	
	AE					
„ 29	e	8 57 0	..	..	..	Do.
	f	9 31 0	..	..	..	
	AN					
„ 30	P	10 15 47	..	..	..	Very feeble shock.
	F	10 35 0	..	..	..	
	AE					
„ 30	P	10 15 47	..	..	..	Do.
	F	10 35 0	..	..	..	
	AN					
„ 30	e	16 48 0	..	..	..	Feeble tremors.
	f	16 59 0	..	..	..	
	AE					
„ 30	e	16 48 0	..	..	..	Do.
	f	16 59 0	..	..	..	
	AN					
Nov. 1	P	19 2 41	..	..	..	
	S	19 10 39	..	..	..	
	L	19 22 43	..	..	..	
	M	19 27 54	16	7	..	
	F	20 31 0	..	..	..	
	AE					
„ 1	P	19 2 41	..	..	..	
	S	19 10 39	..	..	..	
	L	19 22 43	..	..	..	
	M	19 28 16	15	..	8	
	F	20 34 0	..	..	..	
	AN					
„ 2	P	0 50 48	..	..	..	
	M	1 57 25	24	10	..	
	F	3 33 0	..	..	..	
	AE					
„ 2	P	0 50 48	..	..	..	
	M	2 0 43	25	..	8	
	F	3 20 0	..	..	..	
	AN					
„ 2	e	4 35 0	..	..	..	Tremors.
	f	5 14 0	..	..	..	

Date.	Phase.	Time G. M. T.	Amplitude (μ). Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
		H. M. S.				
1931—*contd.*	AE.					
Nov. 2	e	4 35 0	..	..	..	Tremors.
	f	5 14 0	..	..	..	
	AN					
„ 2	P	10 12 26	..	..	..	
	S	10 20 6	..	..	..	
	L	10 31 54	..	..	..	
	M	10 37 46	16	194	..	
	F	14 5 0	..	..	..	
„ 2	P	10 12 26	..	..	..	
	S	10 20 6	..	..	..	
	L	10 31 54	..	..	..	
	M	10 37 49	16	..	207	
	F	14 7 0	..	..	..	
	AN					
„ 2	P	17 50 0	..	..	..	
	S	17 24 39	..	..	..	
	L	17 43 12	..	..	..	
	M	18 14 26	16	7	..	
	F	20 8 0	..	..	..	
	AE					
„ 2	P	17 15 0	..	..	..	
	S	17 24 39	..	..	..	
	L	17 43 12	..	..	..	
	M	18 8 10	16	..	6	
	F	20 8 0	..	..	..	
	AN					
„ 3	e	2 48 0	..	..	..	Do.
	f	3 9 0	..	..	..	
	AE					
„ 3	e	2 48 0	..	..	..	Do.
	f	3 17 0	..	..	..	
	AN					
„ 3	P	16 27 50	..	..	..	Feeble shock.
	F	17 32 0	..	..	..	
	AE					
„ 3	P	16 27 50	..	..	..	Do.
	F	17 47 0	..	..	..	
	AN					
„ 4	P	15 25 42	..	..	..	
	S	15 28 38	..	..	..	
	L	15 30 4	..	..	..	
	F	16 6 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
		H. M. S.				
1931—*contd.*	AE					
Nov. 4	P	15 25 42	..	..	..	
	S	15 28 38	..	..	..	
	L	15 30 4	..	..	..	
	F	16 7 0	..	..	..	
	AN					
„ 4	P	18 4 55	..	..	..	
	M	18 33 1	21	8	..	
	F	19 26 0	..	..	..	
	AE					
„ 4	P	18 4 55	..	..	..	
	M	18 39 8	16	..	5	
	F	19 37 0	..	..	..	
	AN					
„ 5	P	12 25 54	..	..	..	
	S	12 20 58	..	..	..	
	L	12 35 16	..	..	..	
	M	12 39 42	21	80	..	
	F	14 29 0	..	..	..	
	AE					
„ 5	P	12 25 54	..	..	..	
	S	12 30 58	..	..	..	
	L	12 35 16	..	..	..	
	M	12 40 1	17	..	54	
	F	14 38 0	..	..	..	
	AN					
„ 6	e	0 1 0	..	..	..	Tremors.
	f	0 24 0	..	..	..	
	AE					
„ 6	e	0 1 0	..	..	..	Do.
	f	0 24 0	..	..	..	
	AN					
„ 7	Pe	5 9 7	..	..	..	Very feeble shock.
„ 7	F	5 37 0	..	..	..	
	AE					
„ 7	Pe	5 9 7	..	..	..	Do.
	F	5 38 0	..	..	..	
	AN					
„ 13	P	1 15 45	..	..	..	
	S	1 18 6	..	..	..	
	L	1 19 6	..	..	..	
	F	1 40 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
		H. M. S.				
1931—*contd.*	AE					
Nov. 13	P	1 15 45	..	..	..	
	S	1 18 6	..	..	..	
	L	1 19 6	..	..	..	
	F	1 40 0	..	..	..	
	AN					
„ 15	P	5 3 4	..	..	..	Feeble shock.
	F	5 38 0	..	..	..	
	AE					
„ 15	P	5 3 4	..	..	..	Do.
	F	5 38 0	..	..	..	
	AN					
„ 16	P	2 53 23	..	..	..	Very feeble shock.
	F	3 42 0	..	..	..	
	AE					
„ 16	P	2 53 23	..	..	..	Do.
	F	3 41 0	..	..	..	
	AN					
„ 16	P	8 29 18	..	..	..	Do.
	F	9 22 0	..	..	..	
	AE					
„ 16	P	8 29 18	..	..	..	Do.
	F	9 22 0	..	..	..	
	AN					
„ 17	P	9 52 30	..	..	..	Do.
	F	10 22 0	..	..	..	
	AE					
„ 17	P	9 52 30	..	..	..	Do.
	F	10 22 0	..	..	..	
	AN					
„ 18	P	3 50 44	..	..	..	Feeble distant shock.
	F	6 9 0	..	..	..	
	AE					
„ 18	P	3 50 44	..	..	..	Do.
	F	6 9 0	..	..	..	
	AN					
„ 20	P	10 55 21	..	..	..	Feeble shock.
	F	11 35 0	..	..	..	
	AE					
„ 20	P	10 55 21	..	..	..	Do.
	F	11 35 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
		H. M. S.				
1931—*contd.*	AN					
Nov. 20	P	14 29 42	..	..	..	
	S	14 40 6	..	..	..	
	L	14 59 19	..	..	..	
	M	15 29 57	16	5	..	
	F	17 27 0	..	..	..	
	AE					
„ 20	P	14 29 42	..	..	..	
	S	14 40 6	..	..	..	
	L	14 59 19	..	..	..	
	M	15 7 2	29	..	18	
	F	17 30 0	..	..	..	
	AN					
„ 21	e	18 2 0	..	..	..	Tremors.
	f	18 30 0	..	..	..	
	AE					
„ 21	e	18 2 0	..	..	..	Do.
	f	18 31 0	..	..	..	
	AN					
„ 23	e	13 39 0	..	..	..	Do.
	f	14 20 0	..	..	..	
	AE					
„ 23	e	13 39 0	..	..	..	Do.
	f	14 24 0	..	..	..	
	AN					
„ 24	P	9 16 15	..	..	..	Feeble shock.
	F	10 13 0	..	..	..	
	AE					
„ 24	P	9 16 15	..	..	..	Do.
	F	10 13 0	..	..	..	
	AN					
„ 26	e	12 18 0	..	..	..	Tremors.
	f	14 2 0	..	..	..	
	AE					
„ 26	e	12 18 0	..	..	..	Do.
	f	14 2 0	..	..	..	
	AN					
„ 29	P	19 57 57	..	..	..	
	S	20 2 24	..	..	..	
	L	20 5 25	..	..	..	
	F	20 28 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
		H. M. S.				
1931—*contd.*	AE					
Nov. 29	P	19 57 57	..	..	..	
	S	20 2 24	..	..	..	
	L	20 5 25	..	..	..	
	F	20 28 0	..	..	..	
	AN					
„ 30	P	17 7 33	..	..	..	Feeble shock.
	S	17 11 35	..	..	..	
	L	17 13 43	..	..	..	
	F	17 48 0	..	..	..	
	AE					
„ 30	P	17 7 33	..	..	..	Do.
	S	17 11 35	..	..	..	
	L	17 13 43	..	..	..	
	F	17 48 0	..	..	..	
	AN					
„ 30	P	23 48 5	..	..	..	Very feeble shock.
Dec. 1	F	0 7 0	..	..	..	
	AE					
Nov. 30	P	23 48 5	..	..	..	Do.
Dec. 1	F	0 7 0	..	..	..	
	AN					
„ 1	P	3 40 10	..	..	..	Distant feeble shock.
	F	6 0 0	..	..	..	
	AE					
„ 1	P	3 40 10	..	..	..	Do.
	F	6 0 0	..	..	..	
	AN					
„ 1	P	18 37 40	..	..	..	Do.
	F	20 46 0	..	..	..	
	AE					
„ 1	P	18 37 40	..	..	..	Do.
„ 1	F	20 46 0	..	..	..	
	AN					
„ 2	e	21 57 0	..	..	..	Tremors.
	f	22 40 0	..	..	..	
	AE					
„ 2	e	21 57 0	..	..	..	Do.
	f	22 40 0	..	..	..	
	AN					
„ 6	e	4 30 0	..	..	..	Do.
	f	5 31 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
		H. M. S.				
1931—*contd.*	AE					
Dec. 6	e	4 30 0	..	..	..	Tremors.
	f	5 31 0	..	..	..	
	AN					
„ 6	P	23 8 59	..	..	..	
	S	23 12 40	..	..	..	
	L	23 14 44	..	..	..	
	M	23 18 12	11	5	..	
„ 7	F	0 25 0	..	..	..	
	AE					
„ 6	P	23 8 59	..	..	..	
	S	23 12 40	..	..	..	
	L	23 14 44	..	..	..	
	M	23 19 14	9	..	3	
„ 7	F	0 17 0	..	..	..	
	AN					
„ 7	e	19 25 0	..	..	..	Do.
	f	20 20 0	..	..	..	
	AE					
„ 7	e	19 25 0	..	..	..	Do.
	f	20 20 0	..	..	..	
	AN					
„ 8	e	20 1 0	..	..	..	Do.
	f	20 17 0	..	..	..	
	AE					
„ 8	e	20 1 0	..	..	..	Do.
	f	20 17 0	..	..	..	
	AN					
„ 10	Pe	15 21 45	..	..	..	Very feeble shock.
	F	15 43 0	..	..	..	
	AE					
„ 10	Pe	15 21 45	..	..	..	Do.
	F	15 43 0	..	..	..	
	AN					
„ 11	P	14 26 31	..	..	..	Do.
	F	15 17 0	..	..	..	
	AE					
„ 11	P	14 26 31	..	..	..	Do.
	F	15 17 0	..	..	..	
	AN					
„ 14	P	9 24 47	..	..	..	Do.
	F	9 52 0	..	..	..	

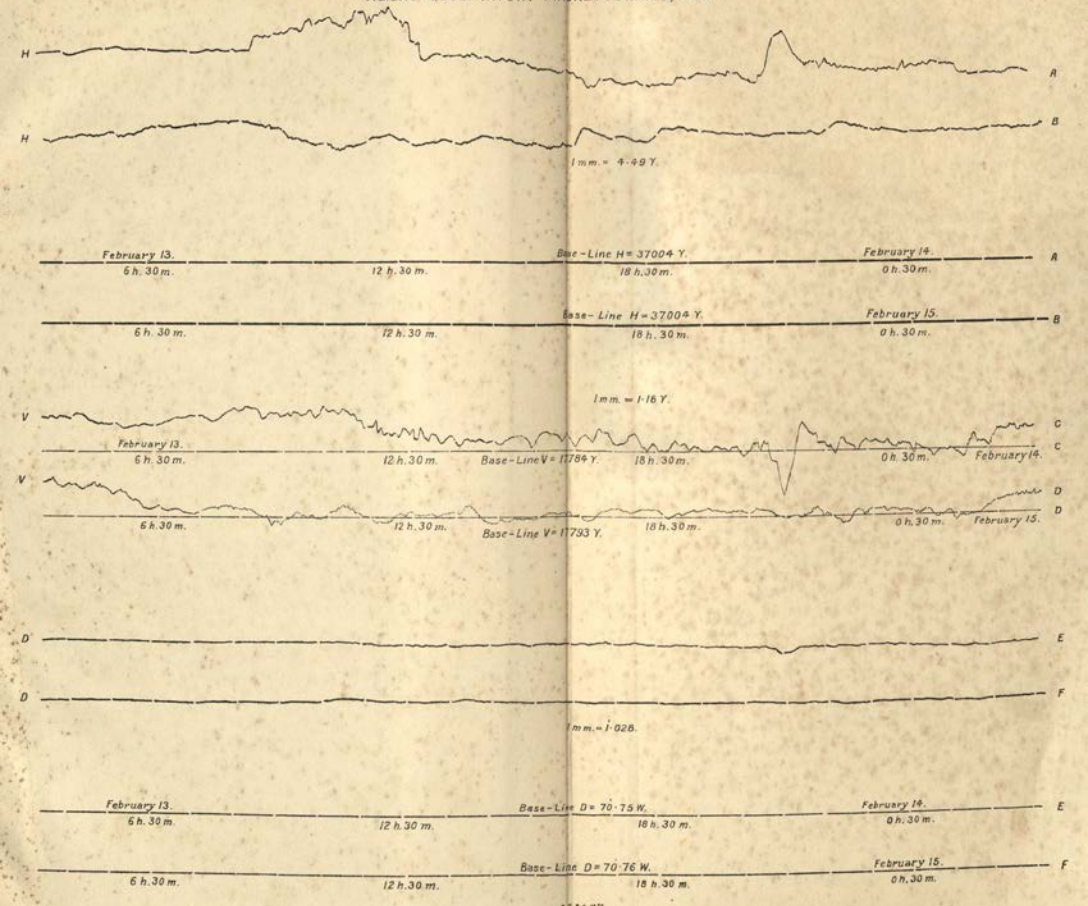
Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.	Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
		H. M. S.							H. M. S.				
1931—*contd.*	AE						1931—*contd.*	AE					
Dec. 14	P	9 24 47	..	..	..	Very feeble shock.	Dec. 18	P	9 56 39	..	..	..	
	F	9 52 0	..	..	..			S	10 2 39	..	..	..	
	AE							L	10 8 4	..	..	..	
„ 14	P	19 33 47	..	..	..	Do.		M	10 13 8	13	..	11	
	F	20 30 0	..	..	..			F	13 20 0	..	..	..	
	AE							AN					
„ 14	P	19 33 47	..	..	..	Do.	„ 19	P	18 5 36	..	..	..	Very feeble shock.
	F	20 30 0	..	..	..			F	18 30 0	..	..	..	
	AN							AE					
„ 15	P	1 37 15	..	..	..	Feeble shock.	„ 19	P	18 5 36	..	..	..	Do.
	F	2 1 0	..	..	..			F	18 30 0	..	..	..	
	AE							AN					
„ 15	P	1 37 15	..	..	..	Do.	„ 20	e	23 44 0	..	..	..	Tremors.
	F	2 1 0	..	..	..		„ 21	f	0 9 0	..	..	..	
	AN							AE					
„ 16	e	19 39 0	..	..	..	Tremors.	„ 20	e	23 44 0	..	..	..	Do.
	f	20 1 0	..	..	..		„ 21	f	0 9 0	..	..	..	
	AE							AN					
„ 16	e	19 39 0	..	..	..	Do.	„ 21	P	18 50 20	..	..	..	Very feeble shock.
	f	20 1 0	..	..	..			F	19 3 0	..	..	..	
	AN							AE					
„ 17	P	21 37 50	..	..	..	Very feeble shock.	„ 21	P	18 50 20	..	..	..	Do.
	F	21 59 0	..	..	..			F	19 3 0	..	..	..	
	AE							AN					
„ 17	P	21 37 50	..	..	..	Do.	„ 24	e	23 12 0	..	..	..	Do.
	F	21 59 0	..	..	..			f	23 36 0	..	..	..	
	AN							AE					
„ 18	P	2 11 44	..	..	..	Do.	„ 24	e	23 12 0	..	..	..	Do.
	F	2 40 0	..	..	..			f	23 36 0	..	..	..	
	AE							AN					
„ 18	P	2 11 44	..	..	..	Do.	„ 25	Pe	3 17 42	..	..	..	Feeble shock.
	F	2 40 0	..	..	..			F	5 4 0	..	..	..	
	AN							AE					
„ 18	P	9 56 39	..	..	..		„ 25	Pe	3 17 42	..	..	..	Do.
	S	10 2 39	..	..	..			F	5 4 0	..	..	..	
	L	10 8 4	..	..	..			AN					
	M	10 13 12	16	14	..		„ 28	P	9 24 5	..	..	..	Do.
	F	13 25 0	..	..	..			F	10 6 0	..	..	..	

Date.	Phase.	Time G. M. T.	Period (Sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
		H. M. S.				
1931—*contd.*	AE					
Dec. 28	P	9 24 5	..	..	..	Feeble shock.
	F	10 6 0	..	..	..	
	AN					
„ 28	P	21 35 52	..	..	..	Do.
	F	22 38 0	..	..	..	
	AE					
„ 28	P	21 35 52	..	..	..	Do.
	F	22 38 0	..	..	..	
	AN					
„ 29	P	16 46 9	..	..	..	Do.
	F	18 6 0	..	..	..	
	AE					
„ 28	P	16 46 9	..	..	..	Do.
	F	18 6 0	..	..	..	

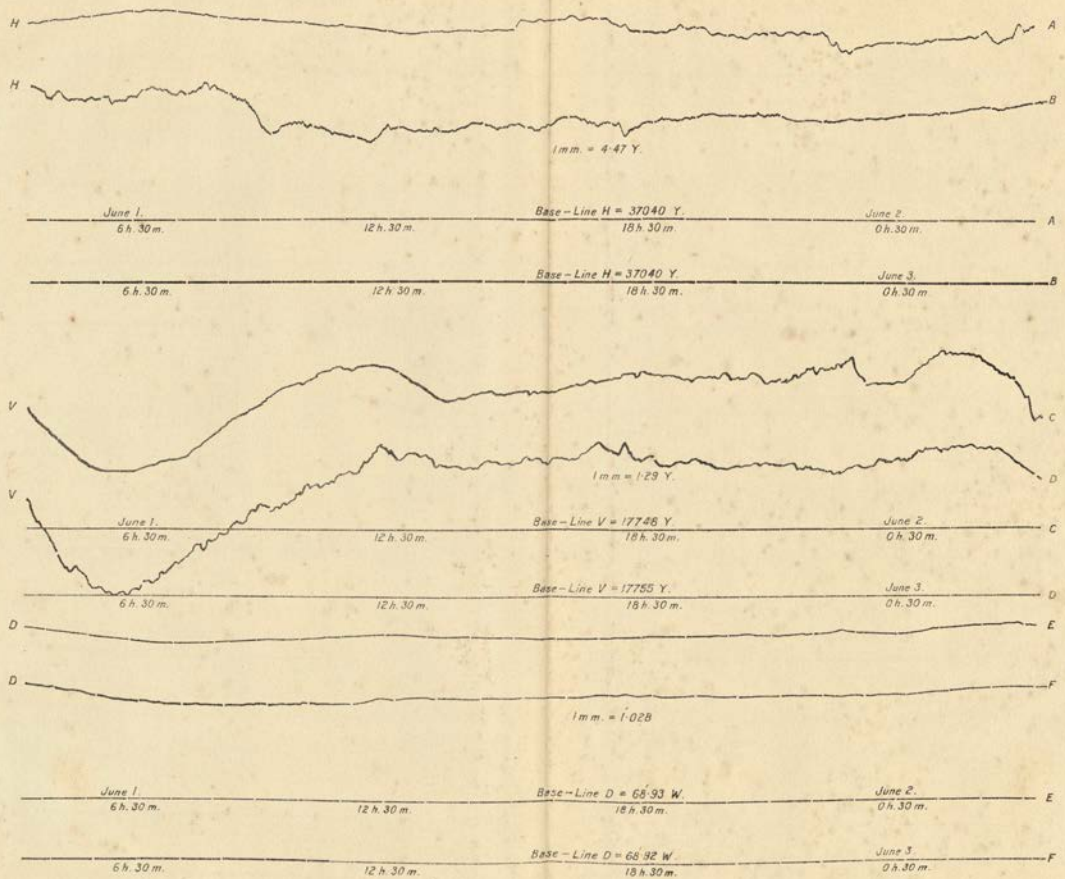
Date.	Phase.	Time G. M. T.	Period (sec.).	Amplitude (μ). AN	Amplitude (μ). AE	Remarks.
		H. M. S.				
1931—*concld.*	AN					
Dec. 30	e	1 25 0	..	..	..	Tremors.
	f	1 45 0	..	..	..	
	AE					
„ 30	e	1 25 0	..	..	..	Do.
	f	1 45 0	..	..	..	
	AN					
„ 31	P	0 30 39	..	..	..	
	S	0 36 15	..	..	..	
	L	0 41 21	..	..	..	
	F	3 5 0	..	..	..	
	AE					
„ 31	P	0 30 39	..	..	..	
	S	0 36 15	..	..	..	
	L	0 41 21	..	..	..	
	F	3 13 0	..	..	..	

GIPD—216 Metro Hom.—15-6-33—250.

ALIBAG OBSERVATORY MAGNETOGRAMS, 1931.

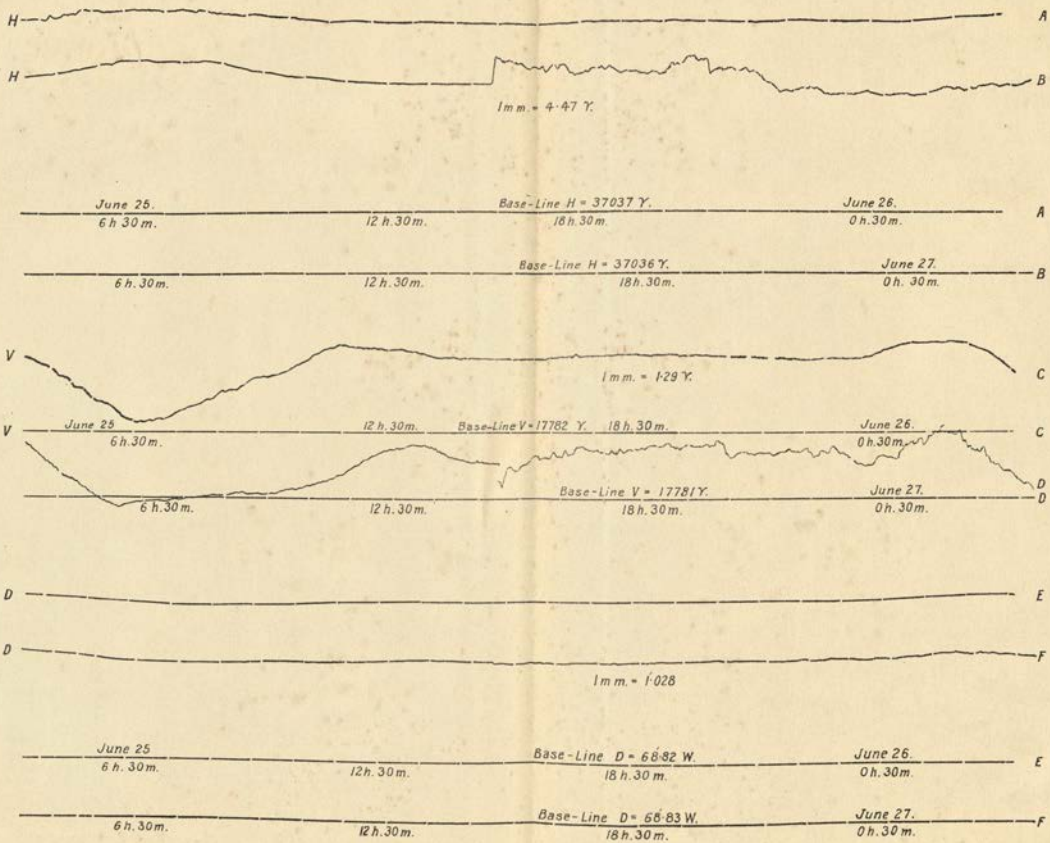


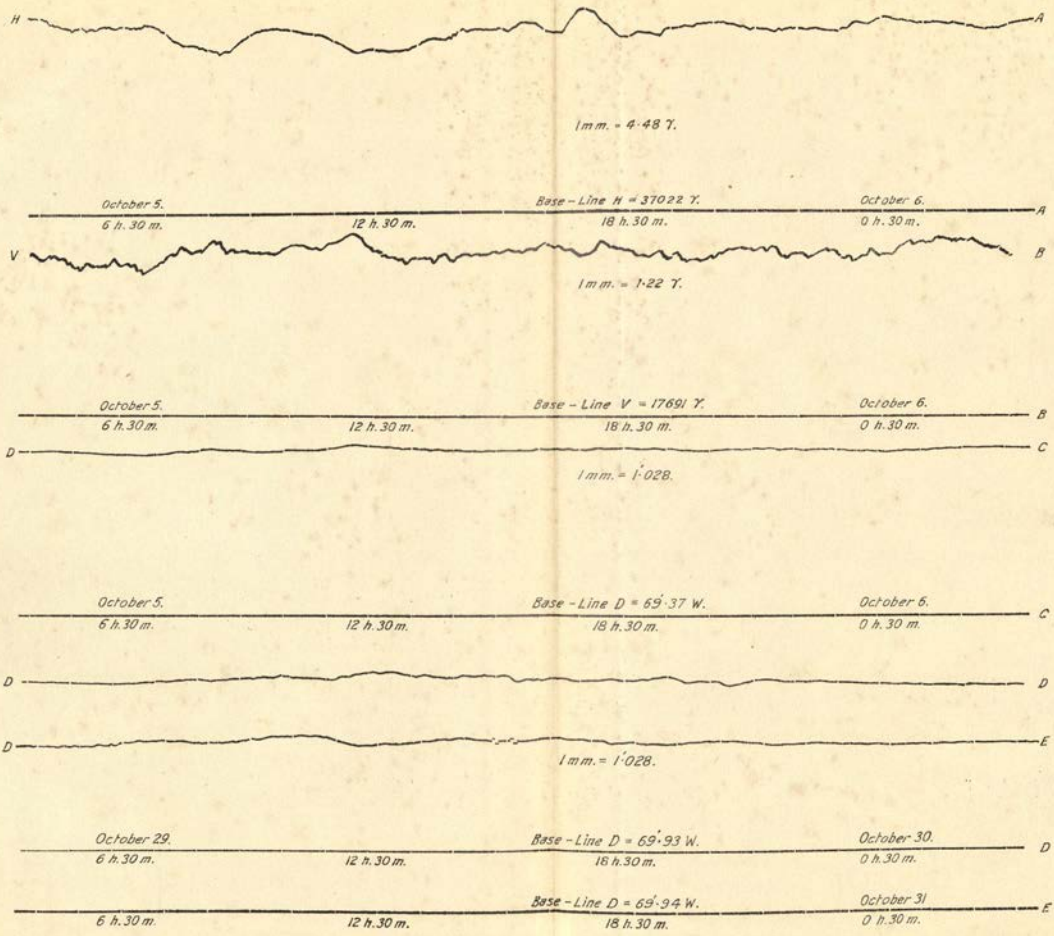
ALIBAG OBSERVATORY MAGNETOGRAMS, 1931.



ALIBAG OBSERVATORY MAGNETOGRAMS, 1931.

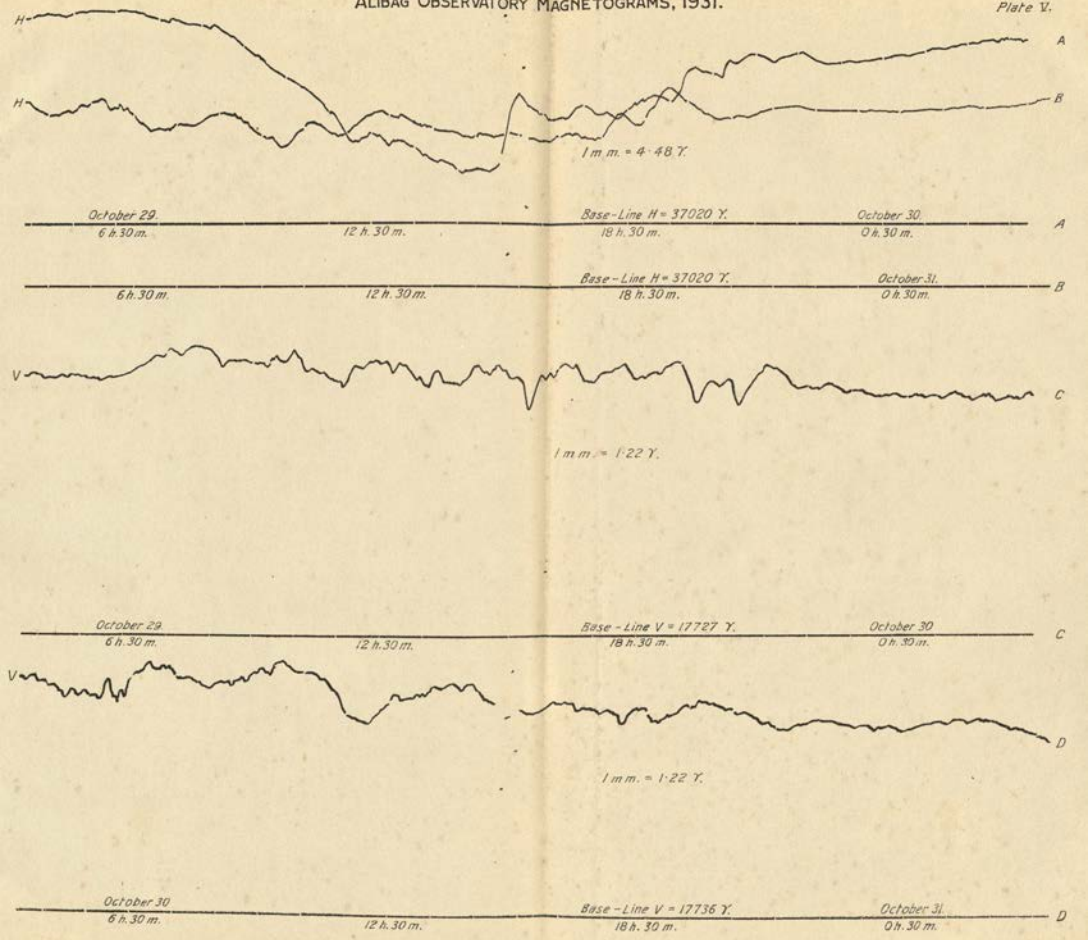
Plate III.




H
A
1 m.m. = 4·48 γ.
October 5.
Base – Line H = 37022 γ.
October 6.
A
6 h. 30 m.
12 h. 30 m.
18 h. 30 m.
0 h. 30 m.
V
B
1 m.m. = 1·22 γ.
October 5.
Base – Line V = 17691 γ.
October 6.
B
6 h. 30 m.
12 h. 30 m.
18 h. 30 m.
0 h. 30 m.
D
C
1 m.m. = 1·028.
October 5.
Base – Line D = 69·37 W.
October 6.
C
6 h. 30 m.
12 h. 30 m.
18 h. 30 m.
0 h. 30 m.
D
D
D
E
1 m.m. = 1·028.
October 29.
Base – Line D = 69·93 W.
October 30.
D
6 h. 30 m.
12 h. 30 m.
18 h. 30 m.
0 h. 30 m.
Base – Line D = 69·94 W.
October 31
E
6 h. 30 m.
12 h. 30 m.
18 h. 30 m.
0 h. 30 m.

ALIBAG OBSERVATORY MAGNETOGRAMS, 1931.

Plate V.



00133516

Digitized with financial assistance from

Government of Maharashtra

on 01 February, 2020